

C. W. M. Smith.




CALIFORNIA  
STATE LIBRARY.

Accessions No. **97913** Received.....

Class **fc 622.05 M6**  
**1862-3 6,7**

CALIFORNIA  
STATE LIBRARY

Call No. **fc 622.05**  
**M6**  
**v. 6-7**  
**1862-63**

  
**0 2007 1200425 4**  
California State Library



CALIF







97913







# Mining and Scientific Press.

A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, THURSDAY, SEPTEMBER 11, 1862.

1862.

NO. 1.

## ARTS & SCIENCES



[From the "Miners' Companion and Guide," published by J. Silvermith, San Francisco, 1862. For sale by all booksellers throughout the Pacific States.]

On the Nature of the Deposits of the Metals and their Ores, and the General Principles on which Mining is conducted.

NO. III.

Intermediate between the regular and irregular deposits of the metalliferous ores are those forms of occurrence designated by the German word "Fahlband." These are more strikingly exhibited in Norway than elsewhere, although the same character has been recognized in other regions on a less extensive scale; and being in some respects peculiar, this mode of occurrence should not be overlooked in a review of the forms of metalliferous deposits.

The Fahlbands (German, Fahlband; plural, Fahlbänder), as developed in the district of the Kongsberg silver mines, consist of parallel belts of rock of very considerable length and breadth, which are impregnated with the sulphurets of iron, copper and zinc, together with a little lead and silver, disseminated through the rocks in such fine particles as to be hardly visible, and only to be recognized by their tendency to decompose, and thus to give the rock in which they are contained a peculiar rotten and disintegrated appearance at the surface; hence the name fahlband, or rotten belt, the word *fahl* being a corruption of *faul*, the miners' term for a rotten or decomposed rock.

In general, these ore-bearing belts are irregular in their dimensions, although constantly observing a certain degree of parallelism with each other. They may be traced in the Kongsberg silver-mining district for several miles, and the greatest depth of any is about a thousand feet. The quantity of ore contained in them is usually too small to be worth working; but occasionally it is sufficiently concentrated to become the object of mining enterprise. There are seven of these fahlbands in the vicinity of Kongsberg, and they are parallel in strike and inclination with the gneissoid and schistose strata in which they occur, and have the same local character in relation to disturbances of stratification, schistose structure, and other external forms.

The fahlbands, however, are themselves traversed by fissure veins bearing argentiferous ores, and the results of extensive mining have shown that these veins are only productive when they intersect the fahlbands, demonstrating that the impregnation of the lode with mineral matter was evidently dependent on the nature of the adjacent rock, and furnishing sufficient evidence that the metalliferous particles in the veins were originally derived from the fahlbands, and probably concentrated there by electro-chemical action.

This mode of occurrence will be recognized as peculiar in its character, being a combination of two distinct forms of metalliferous deposits; but the fahlbands themselves could be hardly considered of much importance, were it not for their enriching action on the lodes which traverse them.

The same fact is observed with regard to the enriching of fissure veins, when they traverse different beds of rock, even

in cases where no perceptible metalliferous particles can be observed in any of them, and when the fahlband structure may be supposed to be wholly absent. In such cases it is not unreasonable to suppose that a chemical examination of these beds, in which a lode shows itself to be better filled with ore than elsewhere, might reveal the existence of metalliferous particles, the presence of which had been previously unsuspected, because they were too finely disseminated through the rock, or were not of a nature to be easily decomposed, and so failed to give a marked external to the stratum in which they occurred. The fahlbands may be considered as approaching nearest to the class of segregated veins, which comes next in the class of metalliferous deposits given above, and to these, in connection with the other modes of occurrence to which the term "vein" is applied, we now turn our attention.

**Regular Deposits.—Segregated Veins, Gash Veins, Fissure Veins.**—The line of demarcation between the three forms of veins indicated above, cannot always be easily drawn, although in most cases the difference is very apparent, and in all is of great importance in judging of the value of a metalliferous deposit. But in some instances there is so gradual a passage from one form to the other, that surface examinations are not sufficient to enable one to decide the question of the actual existence of a fissure or true vein, and it is only by the indication obtained at some depth below the surface, that the vein can be placed in its proper class.

By a vein, as a geological and mining term, in general is understood an aggregation of mineral matter of indefinite length and breadth, and comparatively small thickness, differing in character from, and posterior in formation to, the rocks which enclose it.

Werner, the great Saxon geologist, defined veins as "mineral repositories of a flat or tabular shape, which traverse the strata without regard to stratification, having the appearance of rents or fissures formed in the rocks, and afterwards filled up with mineral matter differing more or less from the rocks themselves." This definition would exclude many veins which do not traverse, but run parallel with the strata, and others which occur in unstratified rocks. The definition given above, of course, includes veins of mineral matter not metalliferous, which are of frequent occurrence, but of no importance in the present connection.

Weissenbach, in a paper published in Cotta's "Contributions to the Knowledge of Mineral Veins," which is especially devoted to the subject of the metalliferous lodes of Saxony, has given a general classification of all the modes of occurrence which can be brought under the head of veins. He divides them as follows:

1. **Veins of Sedimentary Origin.**—Where a fissure has been filled from above by deposition of mineral matter, in a manner similar to that in which the sedimentary rocks themselves have been formed. The origin of these is exceedingly simple, since it is evident that in the process of deposition of any of the stratified masses, as of sandstone or limestone for instance, if this operation were going on in a region where open fissures existed in the subjacent rock, they would be filled by the sedimentary matter, which would assume a stratified appearance in the fissure exactly as above it. The matter thus deposited would not properly be a metalliferous ore, since this class of products have a chemical not a mechanical origin. This is perfectly evident, and it cannot fail to strike one with surprise that a theory so inconsistent with facts should have been adopted by Werner to account for the formation of metalliferous veins. The whole class of veins of sedimentary origin is of little importance.

2. **Veins of attrition.**—Fissures filled with matter introduced by purely mechanical means, such as by fragments of the wall rock falling from above, or produced by friction of their sides against each other. These phenomena are exhibited in many ore-bearing veins, in the formation of which a two-fold action was concerned.

3. **Veins of infiltration, or stalactitic veins.**—These result

from the filling of fissures by incrustation of the sides with calcareous matter deposited from aqueous solution, in the manner of stalactites so common in caverns.

4. **Plutonic Veins.**—Fissures filled with mineral matter, identical with that of rock formations, or mountain masses and supposed to have been introduced by injection, or pressure from beneath upwards, while in a plastic state. Such are the common granite veins in granite or slate.

5. **Segregated Veins.**

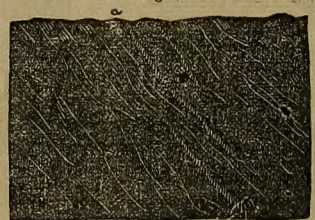
6. **Metalliferous Veins, proper.**

These two latter classes are included in the class of regular, unstratified mineral deposits, as previously shown in the table of mineral formations; the latter division including both gash and fissure veins; and they are the only ones which are of importance in the consideration of the metalliferous veins.

**Segregated Veins.**—Under this class of metalliferous deposits are included those vein-like masses which have a crystalline structure, or, at least, a gangue differing from the adjacent mass, but which do not seem to occupy a previously existing fissure in the rock, being so enveloped and limited on all sides within it, as to show that the metalliferous and mineral substances of which they are made up could not have been introduced into their present position in any other way than by a gradual elimination of their component particles from the surrounding formation. Their process seems to have been of a chemical nature, and one by which materials of similar character were collected together from all directions, or segregated, as it is termed. Of the conditions under which the adjacent rocks must have been when such an elimination of their metallic contents took place, we know little with certainty. We see, however, examples of segregation in masses of lava, as they cool from a state of igneous fluidity, when crystals of the different mineral species found in such rocks are found to have crystallized out into distinct individuals, from what was before an apparently homogeneous paste. The same is true of granite and the trappean rocks. In the former, the single crystals sometimes attain the length of several feet. If circumstances cause the segregating crystals to imitate an elongated mass, we have at once the rudimentary form of a vein-like mass, which may continue to develop itself and acquire considerable dimensions. A tendency to this separation of pure quartzose material will be noticed in almost all of the so-called metamorphic rocks, which frequently show bands of pure quartz, parallel with each other, and lying in the plane of stratification of the enclosing rock; and it should be noticed that quartz is almost universally the veinstone of ores occurring in this form of deposit.

These segregated veins differ from true veins in some important respects. In the first place, they lie parallel with the

Fig. 3.



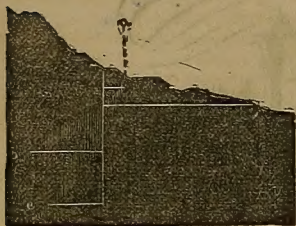
a.—Segregated mass of ore cropping out at the surface.  
b.—Parallel layer not extending upwards so far.

cleavage planes of the formation in which they occur, which is the gneissoid and schistose portion of the metamorphic paleozoic rocks. The annexed wood-cut (fig. 3) represents an ideal section of the form of deposit here under consideration. The ore-bearing mass may or may not appear at the surface; but its extent downwards in one plane is not to be relied upon as in case of a fissure vein, since the accumulation is liable, at any point, to be found thinning out in depth, and transferred to another plane as represented in the figure.

A striking illustration of this form of deposit may be seen in the Rammelsberg, one of the most celebrated localities of the Harz, a section of which is given in the annexed cut (fig.



Fig. 4.



Section of the Rammelsberg.

dimensions decrease in depth, and at 800 feet its thickness is about 20, and its length 750 feet; so that there can be little doubt that the mass will terminate entirely at a certain not very great depth. The ores of this singular mass are chiefly sulphurets of iron, zinc, lead and copper, intimately blended together, and almost entirely destitute of gangue.

The auriferous quartz veins of most gold regions belong to this class of deposits. They consist of belts of quartzose matter with sulphurets of iron, which near the surface is decomposed into a hydrated oxide, and contain gold disseminated through these substances, and sometimes in the adjoining rock, in fine particles, or occasionally, large lumps. These belts run with the strata and dip with them, and in other respects exhibit the phenomena of segregated rather than of fissure veins.

Practically, the most important feature of this class of deposits is that they cannot be depended on in depth as true veins; as they seem almost always to be richest near the surface, and frequently terminate altogether at no very considerable depth. Nor is the ore or metal matter distributed through them with as much regularity as in the true veins, forming often a series of nests and pockets ranged in a general linear direction, and connected by mere threads of ore or barren veinstone.

**KRUPP'S CAST STEEL TYRES.**—Two of these tyres have been loaned to Mr. Krupp by the North London Railway Company, and are placed in the Exhibition, with his magnificent show of 100 tons of cast-steel cannon, axles, tyres, crank, intermediate and other shafts, together of the value of \$90,000.

The tyres above referred to have run sixty-seven thousand miles, and do not yet require turning. The road is very severe upon tyres, and the engines are of the heaviest class, and continually under the brake, the stoppages averaging about every mile.

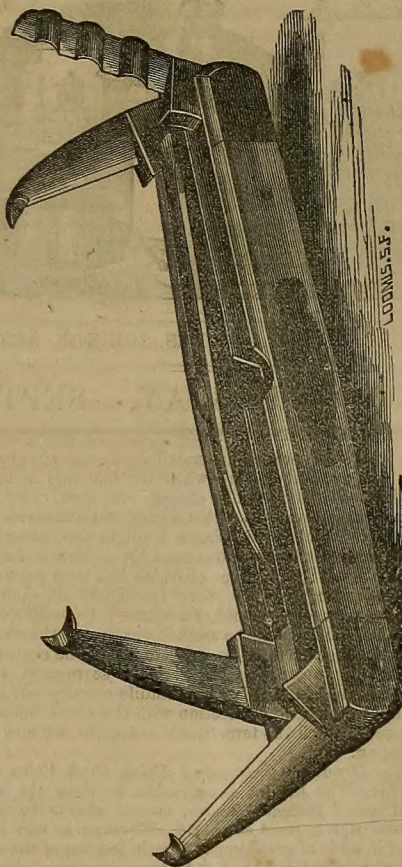
Here is an extract from a report made to the Board of Directors by their engineer, dated April 14, 1862: "The engines of this line run one million miles per annum, in round numbers, and this mileage performed by Krupp's tyres would cost £733 6s. 8., while by the Low Moor tyres the cost would be £2,087 10s."

The average thickness of the tyres is 2.21 inches, and Krupp's are calculated to be worn down to one inch before they are discarded. To run 189,539 miles will require one set of Krupp's tyres, four times turned, at a cost of £139, or six sets of Low Moor, twelve times turned, at a cost of £396, without making any allowance for the value of the old metal—which is greatly in favor of Krupp's. The cost, therefore of running one thousand miles is 14s. 8d. by Krupp's, and £2 1s. 9d. by Low Moor tyres, showing a saving of 65 per cent.

It is a remarkable fact that the Belgian steel is even in-

ferior to iron, showing clearly that the quality of Krupp's steel, and not the mere fact of his tyres being steel at all, is the important consideration.—*American Railway Review.*

### GIRD'S BUDDING KNIFE.



The accompanying illustration, executed at this office, represents Mr. E. D. GIRD'S BUDDING KNIFE, a most invaluable invention for the Pacific States. Mr. J. Silversmith, of San Francisco, has been authorized to dispose of the right for States, Territories and counties for the Pacific Coast only.

This invention is one of the many California has thus far produced, and is certainly deserving of her, it being the most useful and practicable for the purposes designed. The horticulturist who once adopts this knife will find its value so evident that ever after its services will be indispensable, since with it much labor and expense are saved. In speaking of it the *Scientific American* says:

"The above engraving illustrates a knife which is calculated to facilitate materially the process of budding. Upon

the ends of the blades are formed crescent-shaped crosses of steel with fine edges for cutting the T-shaped slit in the bark of the tree to be budded. These blades with their crosses are made of different sizes, so that some one of the three may be adapted to the size of the tree to be operated upon.

"It is the practice of some horticulturists to remove the bit of wood which is cut from the scion with the bud, and to insert the bark only with the bud. To save this operation, the round blade is formed with several curves in its edge, so that it will cut the bark alone from the scion without taking off the bit of wood, the curves being of different radii to adapt them to scions of different sizes.

"With this knife several operations are reduced to one, and the process of budding is greatly facilitated. The crescent-shaped cross is pressed through the bark making the transverse cut, and then by simply carrying the knife down, the vertical slit is made, and the bark is raised at the same time ready to receive the bud. This knife was used in California during the last season, for budding several thousand trees, and it gave great satisfaction to the operators."

Those desiring to purchase will please address Julius Silversmith, San Francisco, respecting terms, &c.

### NEW ADVERTISEMENTS.

#### LATEST IMPROVEMENT

### In LADIES' BUCKLES.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address,  
FREDERIK REICHEL,  
Manufacturing Jeweler,  
sept11 620 Merchant street, San Francisco.

### SEWING MACHINES

AT PRICES WHICH BRING THEM WITHIN THE REACH OF ALL!

THE

### NEW ENGLAND SEWING MACHINES for \$25!

THIS MACHINE stands confessedly at the head of everything now before the public. In cheapness, neatness, compactness, durability and beauty, it has no rival. It is made with special reference to the wants of a family, and any one with the aid of the printed directions can learn to work it successfully in a few hours. It will work from leather to the finest cambric without the change of needle, tension, or feed. It gives the best satisfaction where it is sold, and all who use or examine pronounce it better adapted to meet the wants of every family than any other machine now offered to the public. Gauge and hammer attached.

Every machine warranted, and kept in order free of charge. This is the only cheap machine that will do all kinds of family sewing.

STEWART & SHEAR, General Agents,  
sept11 No. 60 Second street.

### Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS, OR manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.  
Address, J. SILVERSMITH, (Agent for Patentee,) San Francisco.  
sept11

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T. my23

## GENERAL FOUNDRY ESTABLISHMENT AND MACHINE WORKS.

### PALMER, HANSCOM & CO., Proprietors.

Golden State Foundry, First street, near Market, San Francisco.

#### KNOX'S LATE IMPROVED AMALGAMATOR.

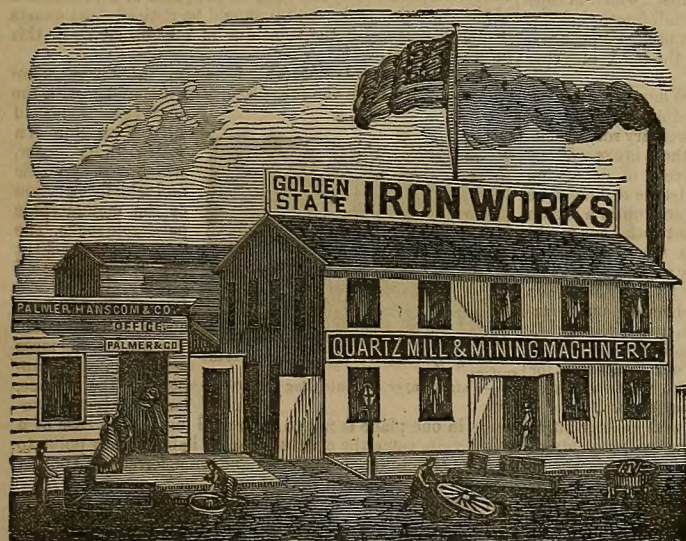
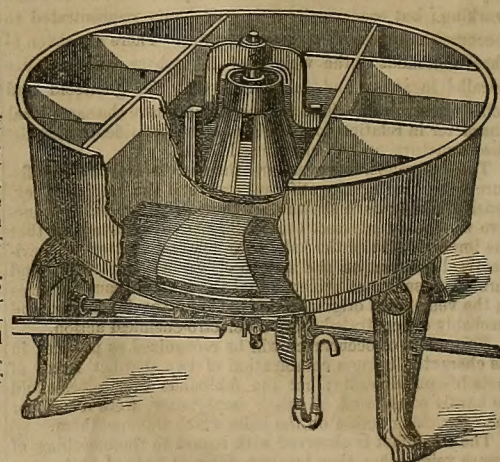
(Manufactured and for sale at the Golden State Foundry, San Francisco.)

Palmer, Hanscom & Co., proprietors of the above well established and favorably known works, throughout the Pacific States, desire to call the attention of mining companies, mill owners, and others requiring machinery of any description, to the fact that they are enabled to execute any and all orders of whatever nature at the shortest notice, and at GREATLY REDUCED PRICES. Their works are the most complete in their appointments on this coast. These gentlemen guarantee entire satisfaction to all who may favor them with their patronage.

Mining machinery, such as crushing mills and improved Knox's Amalgamators, (the best for extracting the precious metals) kept constantly on hand and manufactured at the shortest notice.

Send drawings and specifications for estimates, and address,

PALMER, HANSCOM & CO.,  
Golden State Foundry,  
San Francisco, Cal





CORNS AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skillful and scientific Professors of Philadelphia, and having made this branch of surgical science my specialty for nine years, enables me to operate skillfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir,—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important, but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can recommend you with confidence to the citizens of San Francisco, as one of the most skillful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertions in the new and growing city of the Pacific.

Rev. W. Stanton, L.L.D.,  
Richard A. Vaux,  
Dr. Straub, M.D.,  
Dr. Loomis, M.D.,  
Cleopole Stevens, M.D.,  
Samuel Pincost, M.D.,  
Walter C. Foster, M.D.,  
S. W. Howard, Att'y at Law,  
Pierce Butler,  
Heary B. Linton, M.D.,  
Wm. L. Howard, M.D.,  
Philippe Lidy, M.D.,  
Myers Davis, M.D.,  
W. M. Thompson, M.D. and others.

No. 718 Catharine street—this is to certify that Dr. Kennedy has removed corns and bunions off my feet, which have annoyed me for years. He also removed a cancer from my middle finger, which I had no use of for a period of six months. I cordially commend him to the suffering humanity of Philadelphia as a skillful surgeon.

REFERENCES:  
John Corbett, M.D.,  
Capt McClure,  
Wm. H. Mills, Jr.,  
Rev. Walter W. Stanton, L.L.D.,  
Samuel W. Howard, Att'y at Law,  
Cleopole Stevens, Pharmacist,  
Mrs. Smith, Greene street,  
Mrs. W. L. Howard,  
Walter O. Foster, Com Mer, Third st,  
Myers Davis, Market st, above Fifth,  
Major Comstock,  
Mrs. W. Patridge, Walnut street.

From Dr. W. L. Stevens: Dr. Kennedy has operated upon my feet, and has effectually cured me of some torturing pests that I have been annoyed with for years.

From the Rev. Walter M. Thompson: This is to certify that while sojourning in Philadelphia, Dr. Kennedy has operated on three of my family to my entire satisfaction.

From the Hon. Wm. M. Thorne, ex-member of the Ohio Legislature: This is to certify that I called on Dr. Kennedy to operate on my feet: He displayed great skill as a surgeon, and I am satisfied that he has effectually cured me of those torturing pests which have annoyed me for many years.

From Geo. F. Omerly, 837 Arch street: This is to certify that I called on Dr. Kennedy. He has operated on my feet to my entire satisfaction. au21

50 lbs. MARINE AND FIRE-PROOF PAINT

MANUFACTURED BY THE PACIFIC METALLURGICAL WORKS, IN THIS city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

DIRECTIONS:  
For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

25 lbs. Fire-Proof Paint,

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

DIRECTIONS:  
HOUSE—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.  
ROOF—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof, as one coat when properly applied will last three years.

G. T. Focquet, Superintendent.  
S. C. BRADSHAW, Agt.,  
WORKS, North Beach; Office, 316 California st.,  
SAN FRANCISCO

KNAPP, BURRELL & CO.—Commission Merchants, Dealers in Produce, Agricultural Implements, Leather, etc., 310 Washington. ap25

S. H. TYLER & CO.—Dealers in Roasted and Ground Coffee, Spices, &c. Office, 220 Front street. Mills, cor. Fremont and Mission. ap25

NEWMAN BROTHERS, Importers and Manufacturers of Brushes &c. No. 226 Battery Street, San Francisco. mys

THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hacknied course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone;" "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye.

How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonable.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14

RASCHE & SONS,

131 Montgomery street, bet. Bush and Sutter,

SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

PIANOS, SHEET MUSIC

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;

T. GILBERT, Boston;

C. MEYER, Philadelphia.

Whose Pianos they have always on hand, for sale and to rent.

PIANOS FOR RENT.

New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the trade and professors of music. au14

Very Important to the Afflicted.—In consequence of the wide spread and devastating rule of empyrics throughout California, in the treatment of PRIVATE DISEASES, the Directors have concluded to place before the public the fact that the Resident Physician of the Electropathic Institute, 645 Washington street, between Montgomery and Kearny streets, is the best qualified physician in the State to ensure a PERFECT and PERMANENT CURE in such cases, and he will always be in attendance to consult privately with all who may require his services, and will ensure speedy relief. Should this meet the eye of any one who may have reason to fear that the disease may be lurking in their system, they may call upon him without fear of being discovered; the charges will be moderate and the assistance prompt.  
J. H. JOSSELYN, M.D.,  
Resident Physician.  
au14-3m

LEWIS COFFEY & RISDON'S

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work or the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand; corner of Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY,

J. N. RISDON

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company, at Aspinwall.

FOR PANAMA,

The following Steamships will be dispatched in the month of August, 1862  
Aug. 1st—UNCLE SAM, Captain R. H. Horner.  
Aug. 11—GOLDEN AGE, F. R. Baby, Commander.  
Aug. 21st—SONORA, ——— Commander.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York  
For freight or passage, apply to

FORBES & BABCOCK, Agents,

Je4

Corner of Sacramento and Leidesdorff sts.

GATTEL'S  
CAPILLACEUM,

...OR...

Medicated HAIR TONIC

..FOR..

RESTORING, PRESERVING,

..AND..

Beautifying the Hair.

It cleanses the pores of the skin, entirely frees the scalp from dandruff and all CUTANEOUS DISEASES, thereby preventing baldness and gray hair, and will cause the hardest hair to become soft and glossy.

Ladies will find the CAPILLACEUM a great addition to the toilet, both on account of its delicate and agreeable perfume, and the great facilities it affords in dressing the hair.

Price, 75 cents. For sale by all Druggists.

HOSTETTER, SMITH & DEAN,

Agents.

au28

No. 227 Montgomery street, Russ Block.

READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, WHILE MR. BREWSTER was engaged in the Summer street House in pearing coal oil from one can to another, his wife inadvertently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.

THEN THIS!

COMET ILLUMINATING OIL!

Manufactured expressly for Stanford Bros.

THIS POPULAR

BRAND OF KEROSENE

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

Best Family Oil in the Market

STANFORD BROTHERS,

au14

Nos. 121, 123 and 125 California street.

INTERNATIONAL HOTEL,

Jackson street, a few doors above Montgomery, San Francisco.

The Oldest Established First Class House in

SAN FRANCISCO.

FIRE-PROOF BRICK BUILDING.

FOSTER & COLEMAN, Proprietors.

Most convenient to the Steamers' Landings, business streets, and places of Amusement.

Open all night.

REDUCTION IN PRICES!

The nimble "Bit" is better than the slow "Quarter."

\$1 50, \$1 75 & \$2 per Day.

Fine Bathing Rooms attached to the Barber Shop. Warm and Cold Shower Baths free to guests.

NO DARK ROOMS! EVERY ROOM OPENS TO THE LIGHT AND AIR. Every room is furnished with a first quality Patent Spring Bed and Hair Mattress, and are superior to any other Hotel in the State. The International offers to guests the greatest number and best furnished Family Rooms, and also sets the BEST TABLE OF ANY HOUSE IN THE CITY.

No runners employed at this House. Our coachman will always be found on the boats, to take your checks and procure your baggage for our coaches. No charge for baggage.

We are determined that the International shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the State, and shall aim to merit a continuance of the popular favor we have enjoyed heretofore.



# Mining and Scientific Press.

J. SILVERSMITH, Editor.

THURSDAY ..... SEPTEMBER 11, 1862.

The MINING AND SCIENTIFIC PRESS is published at the State Capitol building, Rooms 23 and 24, corner of Battery and Washington streets San Francisco, Cal., by

J. SILVERSMITH, Editor.

At FIFTY CENTS per month, or \$4 per annum, in advance.  
Advertisements, Fifty Cents per line.

## Engravings, Electrotypes, etc.

WE execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOGRAPHY and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates.

PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

JULIUS SILVERSMITH,

## COMMISSIONER FOR NEVADA TERRITORY.

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington sts., Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE WHO HAVE BUSINESS relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

## Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent Right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

WE have also now associated with us in our business Wm. H. R. Wood, Esq., whose well known legal acquirements, and practical care, punctuality and correctness, eminently qualify him for business of this kind. Dr. Wood also acts as general agent for all persons having business to be attended to either in this city or Washington city.

## Agriculture in the Mines.

The metalliferous districts of California are so extensive, extending as they do from the Rocky Mountains on the east to the Coast Range on the west, and including both ranges of mountains, that the encouragement of the cultivation of the earth in different localities throughout this vast region could not fail to be of great utility and convenience. If all the more important necessities of life were raised at his immediate door, or in his vicinage, it would certainly accrue much to the advantage of the miner. Hence the cultivation of the valleys and mountain gorges throughout the mines should be countenanced and encouraged. Hence, also, by a law of our State a certain protection is thrown around agriculture in the mining districts. But that protection is so indefinite and restricted, and has been so hampered and "whittled down" by the decisions of the courts, that it amounts to but little, if any, encouragement.

So great are the benefits which would attend on such varied avocations, whereby the money with which to buy and the thing to be bought, would be produced in the same locality, and thus the freightage, and drayage and transportation from distant points be obviated, that it would be worth the while of the mining population to take this matter in hand themselves, and adopt rules and regulations on the subject. They are authorized to enact laws for their own government in their different mining districts. Why not, then, adopt some rules by which a farmer raising breadstuffs and meats for your use, in your neighborhood, may be properly and amply protected in the enjoyment of the fruits of his labor?

As the law now stands, any land which is found to contain minerals, no matter in how small proportion, lying in the mining region, may be appropriated by the miner, notwithstanding it may have been previously appropriated for agricultural purposes. But, would it not be a good rule to make the miner's right of ousting the farmer depend on the existence of a certain proportionate quantity of mineral in the soil? That proportion might be fixed at the *minimum* paying quantity; and whenever the ground ceased to contain a sufficient quantity of the precious metals to warrant its being profitably worked, then let it be subject to the claim of the cultivator. Perhaps all the soil in the mining districts contains more or less of mineral properties and substances and it is certainly unreasonable and impolitic to say that because a piece of land may contain a few grains of gold per acre, that, therefore, it cannot be appropriated for agricultural purposes. Hence some standard and rule ought to be fixed by the regulations of the miners, and by State legislation, which will afford a sure test and criterion by which the conflicting claims of miners and farmers may be adjusted, relative to such lands as are situated within the mining regions of the State.

## The Coso Mining District.

A few details respecting this immensely rich mining district may not be inappropriate at this juncture. Of late many rich leads have been discovered and opened, yielding results scarcely to be anticipated. A few months since we published an illustration exhibiting the leading mining localities, with particulars relating thereto. Since then, considerable work and mining enterprises of great moment have been performed, which certainly places mining interests in that district at handsome figures, and the present mine owners promise themselves as rich a harvest as some of the great Washoe adventurers. We will give a short synopsis of the companies now fully under way for developing these mines.

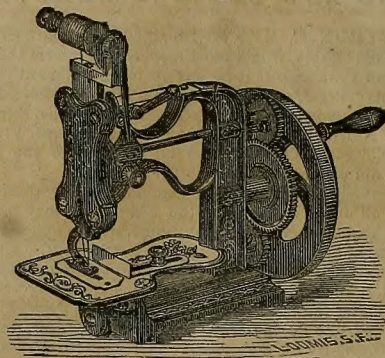
The Pioneer Mill, erected by Mr. G. H. Monroe of San Francisco, was the first crushing apparatus, and is situated at Willow Springs, 5 miles east of the Coso Company's lead; it is a dry crushing mill, propelled by steam, and is capable of crushing about six tons of quartz per diem. Mr. Monroe contemplates soon erecting an 8-stamp mill, which will contain the latest improved steam pans. To this mill belongs three distinct leads, entitled respectively the Winoshick, War-Tab and Decorah, comprising 900 feet each. From tests made of the ore it is found to contain about 60 per cent. gold and about 40 per cent. silver.

The Coso Silver Mining Company have seven leads, which have been described in a former edition. Altogether there are now six mills in working condition, and more are on their way to that country. Some four companies are now incorporated, all of which are prospecting their claims diligently. This district presents some of the most important advantages when compared with other mining localities. Plenty of wood, water, and easy access to the leads by means of good roads, are some of its leading features. The climate is as salubrious as that of Italy, and there is nothing to prevent the miner from prosecuting his work the whole year.

SCIENTIFIC TOUR.—The senior editor of this paper started on the 9th inst. for his lecturing tour through the mining regions of this coast. He sets out well equipped for the expedition, being amply provided with all manner of diagrams and drawings necessary to the elucidation of his subject. Our mining population will, doubtless, receive a great and useful accession to their stock of valuable information relative to the best manner of working and developing the riches of our mineral localities. We bespeak for him an attentive hearing and a liberal patronage.

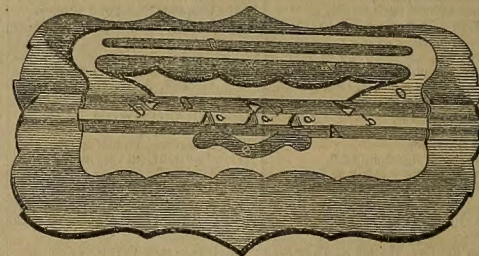
METEORIC SHOWER.—A correspondent of the Red Bluff Beacon writes that just before daylight on the 10th ult., he observed a remarkable appearance in the heavens, as of dropping or falling stars in every direction from zenith to horizon. These luminous globes or globules were apparently of different sizes, from a common marble to that of a hen's egg, and came gently down, some quite near the ground, then burst and vanished. He awakened several member of his family, then went to arouse a friend but found him intently watching the same phenomenon. They all gazed and wondered until the broad glare of daylight rendered the meteors invisible. The appearance was similar to the meteoric shower of the 1st of November, 1833, which was observed throughout the Northern States.

## Modern Sewing Machines.



As a household god, the sewing machine ranks equal and is as necessary as the utensils for preparing our daily nourishment. The combined efforts of science and mechanics have made many improvements, and reduced this machine to such simplicity and cheapness as to bring it within the reach of the poorest housekeeper. From Patent Reports we learn that nearly one hundred patents have been obtained since the original invention, a period of twelve years. As an article in manufacturing, it has proved one of the greatest auxiliaries, and its influence on commerce has been materially felt in every civilized country. We present in this issue an illustration of the NEW ENGLAND FAMILY SEWING MACHINE, of which the above cut is a faithful representation. It ranks probably as the neatest, simplest and perhaps cheapest sewing machine now in use. An agency has been established in this city, and since their introduction the sale has been so great that the factory had to enlarge its facilities to enable them to fill the orders coming from the Pacific States. Messrs. Stewart & Shear, at No. 60 Second street, in this city, are the general agents, but they have established sub-agencies throughout this coast. The cost of this machine is only \$25, as will be seen by the advertisement elsewhere.

## Frederik Reichel's Improved Buckle.



The above engraving presents another splendid improvement in ladies' buckles, for which we have prepared an application for letters patent for the inventor, Mr. Reichel, of this city. This invention consists chiefly in the peculiar construction of the plate (c) which has an orifice (d) through which the waistband is introduced, requiring no sewing; the other end of said waistband being then taken around the waist and passed between the cylinders (a and b), and when the required tension is obtained, the prongs (a, a, a) serve in holding the ribbon securely. This device is by far the simplest, most convenient and most expeditious ornament for ladies yet invented. The inventor is favorably known in this State as a manufacturer of jewelry, &c. Mr. R. will execute all orders entrusted to him, and give information respecting his invention. Elsewhere read his advertisement.

NEW INVENTION.—There is on exhibition at Stockton a new style of windmill of the combination order. It is called "Holmes' Patent," and is so constructed as to be self-regulating, at the same time duplicating the force of the wind and motive power. This is effected by placing the revolving fans in a large drum, which operate directly opposite stationary fans in the drumhead. The governing fans stand perpendicular, and the force of a strong breeze will incline the fan to a liberal angle and contract the flanges, which are so prepared and placed as to almost entirely close the opposite end of the drum, thus, on a direct scientific principle, governing the revolution of the wheel.

BUR CLOVER.—In a correspondence with the California Farmer, Gen. Allen mentions a abundance of "trebol," or bur clover, growing in Los Angeles county. It affords the best sort of hay, and without the trouble of mowing.



## SUMMARY OF MINING NEWS



## CALIFORNIA.

**Mariposa.**—The Gazette says there are some four or five claims in Mariposa creek, near the village of Mariposa, which are paying from \$10 to an ounce a day to the land. The cause of this is that last winter's flood sluiced off the top ground and left the pay dirt more convenient.

Early's quartz vein on Sweetwater, as usual, continues to yield its share of precious metals. The product of three weeks' run with an arrastra, from three tons of rock, was 27 ounces of gold.

**Nevada.**—The Transcript says that several more new quartz leads, and good ones, have been discovered a short distance from Nevada, during the past week. There seems to be quite a mafia for quartz, and a large number of men are out prospecting.

**Sierra.**—Wood and Reittie cleaned up, last week, from 50 days' run of the Independence mills, \$39,500.

## NEVADA TERRITORY.

We gather the following items from the Enterprise of the 30th August:

A specimen of exceedingly rich quartz has been left at this office from the Fringe of the West mine, situated at Silver City. Bright, yellow gold sticks out all over it. The gold is uncommonly coarse for Washoe, and is contained in a mass of decomposed sulphurets of a brown color. The specimen before us came from a part of the lead 200 feet below the surface. 50 tons of ore just raised from this point will average \$150 per ton. They are now running a tunnel that will strike the lead 300 feet below the surface. The tunnel starts near Johnson's mill. There are certainly many more leads in that district that would pay equally as well as the Fringe of the West were this well developed. Several others are paying from \$40 to \$70 per ton. Capital is needed in Devil's Gate district. All the work that has been done so far has been done by miners with little or no means.

The principal companies in the Flowery district are at work on their leads. Several of them are getting out very fair ore, and a few rock sufficiently rich to pay for crushing. The mills are all at work, and though there is not much likelihood of a large town being built in that locality, we have no doubt that Flowery will prove eventually a brisk business place. A few years only are required to develop the many promising mines found in the surrounding hills. As the flow of water is increased by the driving in of tunnels at the head of the canon, many fine sites for water mills may be found in the vicinity of Flowery.

Virginia City is generally spreading "coming out of the wilderness." Over one hundred new buildings have been erected the past few months, and from present appearances one hundred more will be erected the coming fall and winter.

A correspondent writes of this Territory as follows: There is not in the world so many rich mines in the same scope of territory as we have in Washoe. There is not in the whole world a mill built for the reduction of gold and silver ores, equal to one mill (the Gould & Curry) now nearly ready to go into operation in this Territory; and taken together, there are no mills in the world that will compare favorably for completeness in every department with the hundred or more mills now in operation in Nevada.

**Esmeralda.**—The mines here are just now exciting considerable interest, not only among those who are fortunate enough to be interested in them, but among the people of the outside world, who are always watching with eager solicitude the operations and developments which are made in the different mining districts on this side of the Sierras. Although but little has been said about the mines in this district, yet during the season considerable in the way of prospecting has been done, and a large amount of labor has been expended upon the different ledges within the past three months, and more developments have been made, which go to prove beyond doubt, that the mines here are far more extensive than those who were most intimately acquainted with the district ever believed them to be. A number of new discoveries have been made recently, which bids fair to equal, if not excel, anything ever found in the place. No ledge in the district has ever produced better specimens from the top rock than has been found upon the Isabella, Mary Ellen, Osceola, and Rio Vista. Not even the Bunker Hill ledge, which is considered the star ledge of the district, ever produced anything from the top superior to the specimens found upon those above mentioned.

There are two companies owning the Bunker Hill ledge—one called the Discovery company, the other the First South Extension. Those who discovered the ledge divided it as near in the center of the croppings as could well be, and thus making two companies. Many persons have serious objections to extensions, for the reason that, in most cases, they are hard to find; but in this instance, as in that of the Winnemucca ledge, at Aurora, the extension is just as good as the discovery. The company owning the extension have a shaft down to the depth of 40 feet, and have out about 30 tons of very rich quartz, which they intend to have soon crushed. The quartz is now mostly decomposed, and is very rich in both gold and silver. Some of this quartz is very different from anything I ever saw; it is of a bluish purple color, and you can cut it in flakes as you would a piece of hard soap, and is as full of fine gold and silver as it can well be, and called quartz.

The Minchaba comes next in the list. The company owning this ledge have a shaft or incline in about 40 feet. They have taken out some 25 tons of excellent looking quartz, which fairly sparkles with gold, and shows unmistakable indications of being very rich in silver. The ledge is about two feet thick and filled with blue silver veins from one side to the other.

The two ledges above mentioned have the most work done upon them of any in the district. There are a number of ledges here, however, which, if they were opened, would prove as good as the Bunker Hill or Minchaba. Some of the most prominent veins are the High Peak, North Star, Body Bluff, Eureka, Union, and I might mention many more, all of which are well defined quartz veins, and show indications of something worth digging for.

The placer claims are paying very well. The boys, as a general thing, make from \$4 to \$7 per day, and a strike of two or three ounces occasionally happens. They perhaps average about \$5 per day. The gold here is worth but \$12 an ounce. Two years ago the merchants gave \$16 for it. The cause of this depreciation is, of course, unknown.

At the annual meeting held on the 9th August, for the election of Recorder, O. J. Leach was elected. A few amendments were made to the by-laws, but no change of importance.—(Bodie cor. of Star.)

The California State Telegraph company have arranged to telegraph to Aurora, in Esmeralda, by way of Genoa. Dispatches will be sent by the wires to that point, and then forwarded to Aurora each day. Answers will be returned by express and telegraph.

**Humboldt.**—A correspondent of the Silver Age writing from Spring Valley, in the Humboldt mines, under date of Aug. 30, says:

Prospecting is being carried on with much energy. Some very rich strikes have recently been made. The Ophir company, situated in this district, have struck their ledge, which is rich in gold and silver. The ledge is about four feet thick. The Oneida company, on the same lead, are running a tunnel, and expect to strike their lead soon. The Badger company have struck a good silver lead. The Moonlight is considered one of the best claims in Humboldt county. Goods are coming in pretty freely, the large proportion of which consists of liquors. During the past two weeks there has been no

bacon, and no flour, except Salt Lake flour, at Unlerville. Already some of the ranchmen are plowing, preparatory to sowing barley. It is my opinion that barley will grow here in profusion.

There are some very fine prospects in the course of erection at Unlerville and Star Canon. We had quite a distinguished arrival here a few days since in the person of an agent of the Rothschilds. What his business is out here I am unable to say, but he has created quite a sensation among the miners, all of them having "feet" to sell. I have heard of only one purchase made by him as yet. Capital is flowing in, and during the past week several sales were effected in Indian district. There are some 60 men prospecting in that district. I am pleased to say that there is only one Chinaman and woman in those parts.

## OREGON AND WASHINGTON TERRITORY.

Capt. R. Bledsoe who has just arrived from the new mines, writes thus from Florence, under date of Aug. 14:

I got back last night from the new mines, and after prospecting six days I am satisfied that they are as good as the Florence mines. Enclosed find one ounce of gold, which I panned out on Warren's creek, washing only 13 pans of average dirt. From what I saw, I am of the opinion that the mines are extensive, as new creeks and gulches are to be found every day. They are on the east fork of Meadow creek, about 45 miles from Florence, and nearly due east. A great many have gone across Salmon, thinking they were on Payette river, but they are on the right trail now.

Lucas, Morrow & Co., on the river, at Canon City, took out from their claim \$307. Pay dirt on the bed rock from 4 to 6 feet thick. On the afternoon of the 11th, five men furnished dirt from the bed rock for one rocker, and took out 18 5-16 ounces. This was the return for half a day's work. The week previous they took out in one day \$255.

On Rich Gulch, Powers, McDonald & Co., working three men, with sluices, took out on Tuesday of last week \$49 98. Their claim averages about \$15 per ton of the sand.

The Trenton company, six men, on the creek near Canon City, on the 12th, after a little stripping the day previous, took out \$115.

About 150 men are working on Dixie creek, some 15 miles above Canon City, on the opposite side of the river. They report good prospects. Those at work with sluices are making from \$5 to \$10 per day to the hand.

The miners on Canon Creek are working at a great disadvantage, owing to the lack of capital and the scarcity of lumber. Everything goes to show the richness of this creek, and as soon as it is flumed and scientifically worked, great results may be counted upon. Supplies continue scarce.

A correspondent of the Mountaineer writing from Canon City, John Day mines, under date of August 4, says:

The mines are turning out first-rate, and next year this will be one of the best mining camps in the country. One company who are down to the bed rock have not out as high as \$118 to the pan. Another company of three men took out in one day 105 ounces. About 40 tunnels have been started, and these are paying from \$5 to 10 ounces per day to the hand. There are now here and within two miles of this place, nearly one thousand men, and there will be room enough for five thousand more this season.

The same paper, published at the Dalles, gives the following in regard to the trade and prices of goods at that place: Flour, \$8@10; bacon, 16 cents; beans, 12½ cts; coffee, 29c; tea, 80c@1.25; miners' tools are in full supply, and are sold at Portland prices with freight added. Horses and pack animals can at all times be bought at the Dalles at low figures. A fair "pack" can now be had at from \$30 all the way up to \$75 and \$80. A number of pack trains, within the last week, have fitted out at this point for John Day river. The trade of the John Day mines begins to assume quite an important feature in the general trade account of the city.

Another party, writing to a friend from the prospective town of Independence, on one of the tributaries of John Day's river, says the miners are engaged in fluming, ditching and other operations, preparatory to taking out large quantities of the covered ore. They have christened the district in which they are located the "Yellow Bluff District." It is about 1½ miles long and on an average 400 feet wide. It is opposite to the mouth of Granite creek. It is about five feet to the bed-rock, paying about four cents to a pan from the top down. The ground is almost perfectly flat, and before they can work it advantageously they must flume the creek. Lumber is worth \$200 per thousand, making fluming quite an expensive operation. The gold is fine, smooth and heavy. The mines are workable about four months in the year. The weather was so cold on the 25th July as to freeze water in the cabins. Mr. Sessions thinks the gold-bearing range is extensive, but only rich in spots.

The mines on Granite creek were paying well; they extend from the mouth of the creek, up the same, about eight miles. Flour is worth in the mines \$35 @ 100 lbs; bacon, \$45; shovels, \$4 50; axes, \$8; and other things in proportion.

Mr. W. T. Atkeson, writing to his father from Wilson creek, Powder river, says: In four days last week four of us took out \$321, being the first work we have done. On Monday we worked part of the day and took out \$45; yesterday we took out \$149, mostly coarse gold, one piece weighing \$37, and a number of pieces from \$3 to \$10 each. There is quite an extensive region here, and new discoveries are continually being made.

The gold of these mines is worth \$17 50 per ounce, but goes here for \$16. Powder river valley is being settled up—some 30 land claims are already I shall move my family here next spring: some will this fall; but I prefer waiting till spring, to see how the Indians behave.

There is quite an excitement over on Snake river, near the mouth of Burnt river; how it will prove I don't know.

## COLORADO, N. M.

By late intelligence from the Colorado we are informed that from 800 to 1,000 persons were at work on the placers, which are said to be the richest ever discovered on this continent. Whilst gold was abundant, provisions were very scarce, and a famine threatened. Flour was worth \$1 a pound and sugar \$2, and unless provisions are soon forwarded it is feared the miners would be starved out. We learn that a line of sailing vessels are to be put on at this point for the Colorado river, which will materially lessen the price of freight to the mines. Freight is now forwarded from Fort Yuma to the mines at \$10 per ton, and the sea freight must necessarily be less than that charged for land carriage.—[Alta.]

The Los Angeles News says that on the 22d ult., upwards of \$9,000 was shipped from that city to San Francisco.

## Stock Quotations.

[CORRECTED WEEKLY FOR THE "PRESS."]

	SHARES	SHARES PER FOOT.	VALUE PER SHARE	BIDS.
Ophir .....	16,800	12	\$300	\$3300
Gould & Curry .....	4,800	4	500	2400
Central .....	1,800	12	300	1100
California .....	3,600	12	300	1500
Wide West .....	8,000	4	60	450
Sierra Nevada .....	5,600	4	300	150
Daney .....	2,800	2	500	175
Chollar .....	3,600	1 to 10 in.	250	175
Potosi .....	4,400	1	400	190
Lucerne .....	10,000	1	500	15
North Potosi .....	3,600	1	300	20
St. Louis .....	5,000	1	100	10
Real Del Monte .....	2,400	2	250	30
Mount Davidson .....	10,000	3	200	25
Rogers .....	2,000	1	250	12

**JEWELERS' GOLD.**—The London *Mechanics' Magazine* contains the following interesting remarks on this subject:

From very ancient times it has been the practice to divide the ounce troy into twenty-four imaginary parts. An ounce of pure gold, therefore, and what is called twenty-four carat gold, are identical terms. Anything less than twenty-four carat gold indicates that in an ounce of that substance there are so many twenty-fourth parts of pure gold, and that the remaining portions of an ounce of it is made up of an alloy of some inferior metal, usually copper. Except for wedding rings, which are, or should be, made of standard gold, consisting of twenty-two parts or carats of pure gold, and two of copper alloy, jewelers seldom use gold of a higher rate of purity than eighteen-carat. How often they use it of a much lower degree of fineness they know best. There is no doubt that it is possible to give almost any color to gold, by the addition of particular alloys, and of late ingenuity has been at work to give the sixteen-carat gold the appearance of pure gold. This is done by the aid, partly, of what is technically known as the coloring pot, in which the metal is treated to an acid bath of a certain amount of strength. By the judicious use of this contrivance, twenty-two carat gold may be made to resemble very closely native gold, as found in the shape of nuggets in California or Australia. Nuggets are never, however, found to be pure gold—they consist for the most part of 23 or 23½-carat gold, the fraction being made up of an alloy of some inferior metal. In order to test the purity of gold the application of heat is, perhaps, one of the simplest means. Pure gold will not be in the least discolored by it, while twenty-three-carat gold will take a slightly red tint. There is this disadvantage about the mode of testing suggested, it will certainly discolor very materially all gold of degrees of fineness inferior to that of twenty-three-carat, and nothing but the acid bath will restore it to its original hue. In order to effect this latter operation on a small scale, nothing more is necessary than to obtain an earthen pipkin, or gallipot, place the article in it, cover it with nitric acid, and hold it over a spirit or gas lamp, or even a candle, until the acid boils. The result will be that the metal will be restored to its original brightness.

As regards the testing of the genuineness of gold coin, there is nothing equal in simplicity or efficacy to weighing it. It is impossible that any metal inferior to standard gold can be used in the manufacture of counterfeit sovereigns or half-sovereigns which will give pieces, of the same size, of equal weight.

The testing of "jewelers' gold," when used in the manufacture of many kinds of trinkets, is a matter attended with considerable risk and difficulty, and perhaps the only means readily at the command of the purchaser for ensuring a proper relationship between quality and price in such cases, is to ascertain the respectability of the seller.

[Twenty-four-carat gold means pure gold, independent of its quantity—whether an ounce more or less.—Ed.]

**GAS.**—There is a spouting well in Salineville, Ohio, up which gas rushes in large volumes and with great violence.



## V. SQUARZA'S PUNCH FACTORY.

WE PRESENT HEREWITH THE PORTRAIT AND TRADE MARK OF the gentleman who heads this article. Mr. Squarza is favorably known in this State for his Anti-Divorce Liqueur and similar productions, as manufactured by him. We may mention that Mr. Squarza is an fair in the chemico-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,	Anisette,
Cognac do.	Whisky do.	Kirschwasser,
Arac do.	Kirschwasser do.	Brandy Cocktail,
Anti-Divorce Punch,	Coca do.	Anti-Dyspepsia Bitters,
Coffee do.		Appetizer,
Tea do.	Morning Comfort,	Ladies' Tears.
Pineapple do.	Kuemmel,	

And CHAMPAGNES of all brands.



# WHY WILL YOU SUFFER, YOU THAT ARE AFFLICTED?

DISEASES CURED WITHOUT THE USE OF MEDICINES!

THE DIRECTORS OF

## The Electropathic Institute,

645 Washington street,

Offer those who would avail themselves of the researches into the arena of medical science, an opportunity to benefit thereby. Thus, by the application of an art totally differing from the usual routine systems of the day, Electropathy is now the favorite study and practice of the most learned medical savans throughout continental Europe. Every proof exists that the magnetic electro current reaches directly the nervous centres, the brain, spinal cord and nerves of sensibility and motion, the controlling agents of organic life. The application of this powerful and mysterious agent is thus made, under the guiding hand of experience, subservient to the alleviation of disease, restoring through the medium of the nervous system the normal functions of the various viscera. By this agent the pernicious consequences of converting that most delicate of organic tissues; the stomach, into a chemical laboratory or drug shop, is totally avoided. Thousands can testify as to its efficacy, and many have experienced its beneficial effects. When correctly administered, Electropathy is applicable to all diseases to which flesh is heir, but more particularly to complaints of the nervous system, Rheumatism, diseases of the Lungs and Spine.

The Directors have secured the services of Dr. JOSSELYN, whose improved Electropathic Instrument stands in advance of all others as a curative agent. This scientific Physician will be in attendance from 9 A. M. until 8 P. M., to consult with the afflicted, and in all cases where he can conscientiously do so he will warrant a perfect and permanent cure. Those particularly who have exhausted the catalogue of medicines, will do well to call and consult him, and examine the certificates of cure which he has recorded in the Institute.

### Rheumatism! Rheumatism!

The above troublesome disease can be cured by electricity only; and Dr. Joselyn of the Electropathic Institute will warrant a cure, perfect and permanent, in a very short time, or ask no pay for his services.

### Consumption,

That awful and hitherto considered incurable disease, can be cured by the Electro-Magnetic treatment. The Electropathic treatment at once stops the ravages of this fell destroyer, and the cure commences from the first treatment. A cure in all cases will be insured.

### Diseases of the Eye.

The Electric treatment is the only mode by which a rapid and permanent cure can be effected in Sore Eyes. It acts upon the nerves and mucous membrane connected with the eye, and the removal of morbid matter and all inflammation, produces a healthy action, at once restoring that valuable organ to its natural state. A cure warranted, or no pay asked.

### Electro-Magnetic Baths.

Connected with this system are the renowned Electro-Magnetic Baths. Here let us caution the public against the numerous impositions in the bathing line. The pure magnetic bath is one of the most effective aids in the removal of disease from the system, but if given at the wrong time is likely to aggravate trouble; and cases have been known where the patient has been injured so badly as to require months to remove the injury. The only place where these baths can be obtained in all their purity is at the Institute, where the resident physician will be always ready to examine and see that they are not unseasonably administered, and if not necessary, advise the requisite remedy.

Below will be found a list of the cases which have been successfully treated by the Electropathic System, at the Institute, during the last year:

NAME OF DISEASE.	NUMBER.
Rheumatism, - - - - -	821
Neuralgia, - - - - -	368
Dyspepsia, - - - - -	297
General and sexual debility, - - - - -	240
Asthma, - - - - -	220
Bronchial affections, - - - - -	187
Fever and Ague, - - - - -	183
Female irregularities, - - - - -	161
Mercurial affections, - - - - -	150
Diseases of the eye, - - - - -	485
Paralysis, - - - - -	78
Scrofula (long standing), - - - - -	330
Catarrh of the lungs, - - - - -	27
Catarrh of the head, - - - - -	321
Liver complaints, - - - - -	420
Deafness, - - - - -	18
Panama fever, - - - - -	10
Consumption, - - - - -	17
Private diseases, - - - - -	1128

### Females

In need of a physician should bear in mind that here is a remedy that will positively cure all diseases incident to the female economy, without the inconvenience of taking bitter medicines. Here all can be relieved of their troubles and irregularities.

Institute open at all hours. Examinations gratis.

au14-3m

## GREAT REDUCTION IN PRICES.

### STANFORD BROTHERS,

121, 123 and 125 California Street,  
KEEP THE LARGEST STOCK OF ALL KINDS

OF

### Lamp Stock,

And will Sell Cheaper than any House in this State.

LAMPS, CHIMNEYS, WICKS,  
CAMPHENE, BURNING FLUID, ALCOHOL, TURPENTINE, COAL OIL, KEROSENE OIL.  
COMET ILLUMINATING OIL.  
SPERM OIL, LARD OIL, MACHINERY OIL, RAPE SEED OIL, CHINA NUT OIL  
LINSEED OIL, Raw and Boiled, POLAR OIL, SHARK'S OIL, NEATSFOOT OIL, TANNER'S OIL, &c., &c., &c.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

ap16tf

### FREDERICK KESMODEL, Cutler and Surgical Instrument Maker

817 KEARNY STREET,

Between Jackson and Washington streets,  
SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery. The attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are all uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL,  
Inventor and Patentee.

ap8 tf

### PHILADELPHIA BREWERY,

Second street, corner of Folsom, SAN FRANCISCO, CAL.

### Hoelscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment, our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom, where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

Nov9.

### SQUARZA'S PUNCH.

#### HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff street, near Sacramento st.

Branch at 406 Montgomery street.

my30

### FULTON FOUNDRY AND IRON WORKS.

#### HINCKLEY & CO.,

MANUFACTURERS OF STEAM ENGINES,  
Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings,  
Mining Pumps, and all kinds of Machinery,  
Amalgamators, Etc., Etc.

47 & 49 First Street,

BET. MARKET AND MISSION, SAN FRANCISCO

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to Iron when cast. Repairing to Machinery neatly done. Patent Making in its various forms.

D. B. HINCKLEY WM. E. WORTH. WM. A. FIELD

### REMOVAL.

OFFICE OF THE PACIFIC METALLURGICAL WORKS is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER OBDS—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent.

my30 318 California street, near Sansome, up stairs.

A. S. ROSENBAUM & CO.—Importers of pure Havana Cigars, Tobacco, etc., corner Clay and Battery, 25 and 27 Cedar street, New York.

## J. D. DEMAREST, M. D., Graduate of N. Y. University, 1848.

Professor of the theory and practice of Medicine, as demonstrated in the treatment and Cure of Special Diseases in this State, during the last thirteen years.

IN ALL THE BRANCHES OF BOTH THE ARTS AND SCIENCES, AS WELL as the Medical Profession, speciality has ever been recognized by men of judicious reflection, as both progressive and instructive, for it is a perfectly well demonstrated fact that any individual, however astute he may be, attains to an infinite greater degree of perfection by a thorough and persevering continuity to one branch of art, science, medicine, or mechanics, than if he attempted to accomplish half a dozen—as in the latter case he would be likely, nine times out of ten, to obtain at most but a very superficial knowledge of either. In the practice of medicine or surgery, it unravels, simplifies and makes clear to the arduous student the mysterious complications (complicated on account of the numerous causes which produce them) which diseases of any kind take upon the human system; operating as they do frequently both on the mental and physical organs. It seeks to recuperate and restore the functions to their natural and proper status, as well as to neutralize all antagonistic influences to which the system is continually subject. Certain it is, that while the busy affairs of life seem to exhaust all our time and attention, the incipency and progress of disease, sometimes of dangerous and fatal character, approach us almost unnoticed. Slow in its progress, but insidious in its course, a disease, or even the simplest disturbance of a single function, frequently becomes an affair of imminent danger when least expected. To this attention of the physician of specialities is always earliest given. With proper perceptive powers, added to ample experience, he is necessarily able to arrive with unerring certainty to a correct conclusion as to the character of the ailment and the proper appliances for its cure. This I have never found to fail. A remedy properly administered, and at the proper time, is sure to effect the object of its mission, provided it be directed by the hands of a skillful physician, who knows his business. I need not reiterate the old adage, that "Health is the endorsement of Divinity," sent to us for our own benefit, and that we should not for a moment disregard the secret admonitions that tell us to beware, lest we fall imperceptibly into a labyrinth from which it will be much more difficult to escape than if we had given proper attention to ourselves before venturing so far. Consult your physician before it is too late; confide in him, and you will save yourself an infinity of suffering.

Below will be found a few of the testimonials received by Dr. Demarest previously to his leaving home for this country in 1849:

NEW YORK, Jan. 14, 1848.

This may certify that Dr. J. D. Demarest, by the assiduity and attention which he has given to his studies, and his uniformly good conduct, justifies me in believing that those among whom he may be placed, can repose confidence in his professional attainments.

VALENTINE MOTT, Prof. Surgery N. Y. University.

I concur in the favorable impressions of my colleague.

SAUL HENRY DICKSON,

Prof. Theory and Practice of Medicine, N. Y. University.

MARTIN PAINE, Prof. Materia Medica, N. Y. University.

This may certify that Dr. J. D. Demarest has been in my office for some time past, and has attended a number of my patients for me, with perfect satisfaction both to them and myself. I, therefore, take pleasure in recommending him to any person or persons requiring medical services. I can also speak highly of his moral as well as professional character.

J. WELDON FELL, M.D.

New York, December 5, 1848.

I take great pleasure in recommending to the notice of all "whom it may concern," Dr. Demarest, a gentleman of first rate attainments in his profession; and a man in every way qualified to be trusted with the health and lives of any body of men he may choose to join. I have had his acquaintance for a long time, and he has attended my patient for me with entire satisfaction.

N. CLARK LEAVINGS, M. D.

New York, January 29, 1848.

Being desirous, above all things, of rendering myself proficient in my profession, I assure my patients and the public that I attend personally to all cases that come before me, either by correspondence or by personal visits. The strictest confidence and the utmost regard for professional honor and secrecy always observed.

Patients residing in any part of this State can have the remedies applicable to their several disorders forwarded to them, without risk of exposure. Be minute in the details of your case, as regards the duration of the complaint, symptoms, age, general habits of living and occupation.

All female complaints, of whatever name or nature, treated successfully. Those ladies whose complaints naturally excite a hesitation in applying for advice, may rest assured that in most instances a personal interview is unnecessary, as remedies and general instructions can be administered through correspondence. Address, DR. J. D. DEMAREST, San Francisco, Cal.

Office—S. E. corner of Washington and Sansome streets, over Ulman's Book Store, nearly opposite the Post Office. je27

AGENCY FOR PATENTS.—The undersigned having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

### WETHERED & TIFFANY,

Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

### REAL ESTATE AGENT,

410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, LOANS NEGOTIATED

### GARRATT'S PATENT COUPLING.

#### W. T. & J. GARRATT,

CITY

## BRASS & BELL FOUNDERS,

Cor. First & Market sts., opp. Oriental Hotel,  
SAN FRANCISCO.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE AND LIFT PUMPS, Church and Steamboat Bells, Tavern and Hoop Bells and Gongs, Hose and all other kinds of Castings, Cylinders, Steam Whistles, HYDRAULIC PIPES AND NOZZLES FOR MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS OF ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."

TANDLER & CO.—Importers and Jobbers of Foreign and Domestic Wines and Liquors, 317 and 319 Front cor. Commercial. ap16

F. G. BEPLER, Practical Coppersmith, No. 22 Bush street, between Sansome and Battery. my30



**DR. L. J. CZAPKAY'S**  
**PRIVATE MEDICAL & SURGICAL INSTITUTE.**  
 Sacramento street, below Montgomery,  
 Opposite the Pacific Mail Steamship Company's Office,  
 SAN FRANCISCO.

*Established in 1854 for the Permanent Cure of all Chronic and Private Diseases, and the suppression of Quackery.*

Attending and resident Physician, Dr. L. J. CZAPKAY, M.D. in the late Hungarian War; Chief Physician to the 20th regiment of Hanover; Chief Surgeon to the Military Hospital of Pesth, Hungary; the late lecturer on Genito-Urinary Diseases and Diseases of Women and Children; and Honorary Member of the Philadelphia College of Medicine.

Particular attention paid to the treatment of diseases peculiar to Women and Children.

Office Hours—From 9 A.M. to 9 P.M. Communications strictly confidential. Permanent cure guaranteed or no pay. Consultations, by letter or otherwise, free. Address,

L. J. CZAPKAY, M.D.

### TO THE AFFLICTED.

DR. L. J. CZAPKAY returns his sincere thanks to his numerous patients for their patronage, and would take this opportunity to remind them that he continues to consult at his Institute for the cure of all forms of Private Diseases—such as Syphilis, Gonorrhea, nocturnal emissions, and all the consequences of self-abuse. In the first stages of syphilitic or gonorrheal diseases, he guarantees a cure in a few days, without inconvenience to the patient or hindrance to his business. When a patient, by neglect or improper treatment, has developed the secondary symptoms of syphilis, such as buboes or painful swellings on the groins, or ulcers in the throat and nose, which, if not checked, destroy the soft parts and cause the bones to mortify, separate and come away, leaving the sufferer an object hideous to behold; or when blotches and pimples break out on the skin, or when he has painful swellings upon the bones, or when his constitution is injured so as to predispose to consumption or other constitutional disease, the Doctor guarantees a cure or asks no compensation.

In rheumatism, chronic or acute; in dysentery or diarrhoea, he has safe and effectual remedies. For the treatment of the consequences of self-abuse—such as nocturnal emissions, nervousness, timidity, headache, pains in the back and limbs, with general weakness, loss of appetite, loss of memory, injury to the sight, restlessness, confusion of ideas, dislike for society, and a feeling of weariness of life, with the nervous system so excitable that slight noises, shock or startle the patient, making his existence miserable. For the above in ladies the Doctor will guarantee a cure, or ask no compensation. He can be consulted free of charge, and invites all to call, as it will cost them nothing, and may be much to their advantage. Office hours from 9 A.M. to 9 P.M.

Dr. L. J. Czupkay is daily receiving applications from every part of this State and from Oregon and Washington Territory, for the treatment of every form of disease, and there is not one who will come forward and express dissatisfaction; on the contrary, the Doctor is in daily receipt of letters expressive of gratitude and thankfulness, some of which are published below by permission.

Dear Sir—Having entirely recovered from my sickness, I avail myself of this opportunity to return my thankful acknowledgments for the relief that you have given me. When I think of the distressing bodily weakness under which I have suffered, and the nervousness, headache, fearfulness, want of confidence, dizziness, restlessness, weakness in the limbs, loss of memory, confusion of ideas, dislike for society, nocturnal emissions, and many other troubles, which had made my life miserable, I can hardly express the gratitude I feel for my existence had become a burthen to me, and nothing afforded me the least gratification, whilst now I feel perfectly well and can enjoy life to my entire satisfaction. Knowing that there are many afflicted as I have been, you have permission to make use of this letter as you may think proper. Believe me gratefully yours,

M. MICHELS.

To Dr. L. J. Czupkay, San Francisco.

MARTINSVILLE, June 3, 1855.

Dr. L. J. Czupkay, San Francisco: Sir—I have used the lot of your medicine, and do not think I shall need any more, as I feel very well, except that I have not entirely got my strength yet, but soon will with the appetite that I have. It is just three weeks, you may recollect, since I called at your Institute, with my constitution, as I thought, entirely broken, and never thought you would be able to cure me perfectly, but thought you might be able to do something to ease the pain in my back and head, and strengthen my limbs, which were so weak that they would almost give way under me, when I walked, and strengthen my nerves so that I would not get excited and tremble at every little thing. Now, that you know what I expected, you may judge of my satisfaction at my complete recovery from those symptoms, and the removal of those blotches and sores from my skin and the ulcers from my throat, and the entire stoppage of these emissions, which you and were principally the cause of my sickness.

I can hardly tell you which is the greatest, my joy or my surprise, for except not having got my strength, I felt as well as any man can feel.

Enclosed I send you Twenty Dollars over your charge, and think myself cheaply cured. If you think anybody will be benefited, you may put this letter in the newspapers. Believe me gratefully yours,

THOMAS HAYDEN.

### [CERTIFICATE.]

The undersigned desirous of acquainting those who may be unfortunate enough to be similarly afflicted where a permanent relief of their sufferings may be obtained, feels it his duty to thus publicly express his sincere gratitude to Dr. L. J. Czupkay, for the permanent recovery of his health. Borne down by the distressing symptoms incident to the vicious practices of uncontrollable passion in youth, depressed in body and mind, unable to perform even the most trifling duty imposed upon the daily avocations of life, I sought the advice of many physicians, who at first regarded my disease as of trifling importance, but alas! after a few weeks, and in several instances months, of their treatment, I found to my unutterable horror, that instead of relief my symptoms became more alarming in their torture, and being told by one that the disease being principally confined to the brain, medicines would be of little consequence, I despaired of ever regaining my health, strength and energy; and as a last resort, and with but a faint hope, I called upon Dr. Czupkay, who, after examining my case, prescribed some medicine which almost instantly relieved me of the dull pain and dizziness in my head. Encouraged by the result, I resolved to place myself immediately under his care, and, by strict obedience to his directions and advice, my head became clear, my ideas collected, the constant pains in my back and groins, the weakness of my limbs, the nervous reaction of my whole body on the slightest excitement, the misanthropy and evil forebodings, the self-distrust and want of confidence in others, the incapacity to study and want of resolution, the frightful, exciting, and at times pleasurable dreams at night, followed by involuntary discharges, have all disappeared, and, in fact, in two months after having consulted the Doctor, I felt as if inspired by a new life, that life which, but a short time ago, I contemplated to end by my own hand.

With a view to guard the unfortunate from falling into the snares of incompetent quacks, I deem it my duty to offer my testimony to the merit and skill of Dr. Czupkay, and recommend him to all who may stand in need of medical advice, being assured by my own experience that, once under his care, a radical and permanent cure will be effected.

B. F. FILLMORE. [L.S.]

State of California, city and county of San Francisco—Subscribed and sworn to before me, this 17th day of April, A. D. 1856.

(Signed) JOHN MIDDLETON, Notary Public. [L.S.]

PACIFIC FOUNDRY AND MACHINE SHOP, First Street, between Mission and Howard, San Francisco, California.—By recent additions to before extensive establishment, we can confidently announce to the public that we now have

*The Best Foundry and Machine Shop on the Pacific Coast.*

With upwards of forty-five thousand dollars worth of patterns, we are enabled to do work cheaper and quicker than any other establishment on this side of the Rocky Mountains.

We make to order, and have for sale, High and Low Pressure Engines, both Marine and Stationary; Straight Quartz Mills of all sizes and designs; Stamp shoes and Dies of iron, which is imported by us expressly for this purpose—its peculiar hardness making shoes and dies last two or three months. Mining Pumps of all sizes and kinds; Flouring Mills; Gang, Sash, Malax, and Circular Saw Mills; Shingle Machines, cutting 25,000 per day, and more perfectly than any now in use. One of these shingle machines can be seen in operation at Metcalf's mill in this city.

Knox's Amalgamators, with the latest improvements; Howland & Hanscom's Amalgamator; Goddard's Tub, lately improved, in fact, all kinds now in use.

Quartz Screens, of every degree of fineness, made of the best Russia Iron. Car Wheels and Axles of all dimensions; Building Fronts; Horse Powers; Smut Mills; Boiler Fronts; Wind Mills; of Hunt's, Johnson's and Lum's Patent; and to make a long story short, we make castings and machinery of every description whatever; also, all kinds of Brass Castings.

Steamboat work promptly attended to. Thankful to the public for their many past favors, we would respectfully solicit a continuance of their patronage. Before purchasing, give us a call and see what we can do.

GO DDARD & CO

### ADVANTAGES

—OF—

### BRYAN'S IMPROVED MILL.

THIS MILL will Crush, with the same weight of Stamps, Twenty-Five per cent. more rock than any other mill yet invented. It is also Cheaper, more Durable and run with Less Power. All parts of it being fitted together before leaving the shop, it can be put up set at work Crushing the Ore, in Ten Hour ter arriving on the ground!

Every one exclaims after seeing the Mill in operation, "Why has not so perfect and ye simple a mill been invented before? It would have Saved the Fortune of many a Miner expended in worthless machinery, and enriched the STATE A THOUSAND FOLD!"

### QUARTZ MILL SCREENS

Of all sizes, furnished with dispatch.

### ADOPTED AND NOW USED BY

Eastern Slope Gold and Silver Company, } Washoe  
 Bartola Mill Company, }  
 Ophir Mining Company, }  
 Union Reduction Company, } San Francisco  
 Oden & Wilson. }

### THE FOLLOWING GOODS TO BE FOUND AT A H. D. PEARCE'S:

Gents' Heavy Gold Cases, different patterns;  
 Ladies' Heavy Gold Cases, do do;  
 Gold Telescopic Pen and Pencil Case;  
 Extension Screw, Heavy Silver, for Gents';  
 Extension Screw, Heavy Silver, for Ladies';  
 Silver Extension Cases;  
 Silver Telescopic Cases;  
 Screw, Silver and Ebony Desk Holders;  
 Slide Silver and Ebony Desk Holders;  
 Reverse Silver and Ebony Desk Holders;  
 Pen Holders, Silver and Ebony;  
 Pen Holders, Gold and Ebony;  
 Pen Holders, Gold and Ivory;  
 India Rubber Propelling Pen and Pencil Cases;  
 India Rubber Propelling Pencils, short.

All the above goods are made to order and warranted; will be sold cheap for cash. There are some thirty different patterns, leaving an opportunity for parties to select and be suited.

A cheaper class of Pens direct from New York, at wholesale only.

Gold Pens constantly on hand. Gold Pens repaired.

H. D. PEARCE,  
 606 Montgomery street, between Clay and Merchant, up stairs.

### THEODOR KALLENBERG, MAKER OF MODELS for Inventors,

MACHINES, MATHEMATICAL Optical and Philosophical instruments, Scales, Weights, etc.; Steel Stamps, Dies and die sinking, Embossing Stamps.

Repairing of machinery promptly attended to. No. 4 Sansome street, corner Market, San Francisco.

## A. ROMAN & CO.

WHOLESALE AND RETAIL

## BOOK ESTABLISHMENT.

417 and 419 Montgomery street,

SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.  
 A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.  
 A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals. Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.  
 Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.  
 Piggot on the Chemistry and Mining of Copper.  
 Practical Mineral Assaying and Mining. Overman.  
 Gold Mining and Assaying; by Philip.  
 Miners' Companion and Guide, compiled by Silversmith.  
 Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.  
 Practical Assaying, by Michell.  
 Silver Ores and Silver Mines, by Prof. Blake.  
 Ure's Dictionary of Arts, Manufactures and Mines.  
 Weisbach's Mechanics of Machinery and Engineering.  
 Nevillo's Hydraulic Formula Tables.  
 Fresenius' Chemical Analysis.  
 Together with many other works in this & similar lines.  
 Books imported to order on short notice.

## A. ROMAN & CO.,

417 & 419 Montgomery Street.

## DEVOE & CO.'S STEAM ENGINE

—AND—

## MACHINE WORKS,

Corner Market & Fremont streets, San Francisco.

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILL Irons, Flour Mills, Quartz Mills, etc., etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT Cutting

AGRICULTURAL MACHINERY of all kinds made and repaired.

Duplicate parts of Threshing and Reaping Machines and Threshing Teeth made to order, on the most reasonable terms.

Steam Engines and Boilers constantly on hand, and for sale cheap. Screw-Cutting Turning Lathes for sale.

JE18

DEVOE & CO.

## WHEELER & WILSON'S

## Family Sewing Machines,

WITH NEW IMPROVEMENTS,

JUST RECEIVED,

ARE THE ONLY PERFECT MACHINES FOR

STITCHING, BINDING,

HEMMING, CORDING,

QUILTING, TUCKING,

FELLING, GATHERING,

AND EMBROIDERING.

AS ALSO, THE

MOST ECONOMICAL FAMILY SEWING MACHINE

IN USE.

Call and see the improvements.

H. W. WADSWORTH, Agent.

Corner Montgomery and Sacramento sts.

au7

## WHILE YOU HAVE THE MONEY,

MAKE SURE OF A HOME!

## NEVER HAZARD THE LAST DOLLAR!

To Cariboo and Salmon River Miners, and all others who wish to purchase LOTS in San Francisco with a PERFECT TITLE:

The undersigned will sell Building Lots for from \$10 to \$200. Also 50-acre Lots and entire Blocks of the most beautiful gardening lands in the city and county of San Francisco, on the line of and at the WEST-END DEPOT OF THE SAN FRANCISCO AND SAN JOSE RAILROAD. Persons desiring to invest a few dollars, or hundreds, or thousands of dollars, would do well to call on the undersigned, as he deals ONLY IN LANDS WITH A PERFECT TITLE, to wit: those held under

A PATENT OF THE UNITED STATES!

Persons residing in the interior, or who are about to go to the Cariboo or Salmon River Mines, can purchase this property and leave it without any fear of adverse claims or titles springing up in their absence.

The undersigned will, if desired, give his personal attention to the assessing, paying of taxes, etc., on all lots purchased from him, and will forward to each non-resident purchaser his tax receipts, free of all cost save the actual amount of the taxes.

Office—No. 19 third floor of Naglee's Building, (south-west corner of Merchant and Montgomery streets.)

m8-f

HARVEY S. BROWN.

THURNAUER & ZINN—French and German Fancy Baskets, Willow Ware, Chairs, Ladies Work Stands, etc., 320 and 322 Battery st.

ap16



## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual loss was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14, while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

For parting silver from gold when gold is below 300-1000ths fine: . . . . . 3cts per oz.  
 " from 300-1000ths. to 750-1000ths fine. 7cts " "  
 " " 750-1000ths to 950-1000ths " . 14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
 301 " 500, 7cts, " " " "  
 " 501 " 1000, 14cts, " " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

In regard to the deposits of *Washoe silver*, the rule will hereafter be, that the value of gold contained in the same will be paid in gold coin, and the value of silver in silver coin. The value of the silver will be calculated at \$1.21 per standard oz., and is exempted from the coinage charge, unless deposited for silver dollars, in which case a charge of  $\frac{1}{2}$  per cent. will be made additional. Bullion of the above denomination will be entered on the gold and silver register, as most congruous with the physical aspects of the material, but in the warrant it must be marked that so much is to be paid in gold and so much in silver, according to the contents reported by the assayer. The above rules, and charges were promulgated on July 10th, by Superintendent Robert J. Stevens.

U. S. BRANCH MINT, Nov. 6th, 1861.

On and after the 15th inst., a charge varying in accordance and the character of the deposit, from half a cent to three cents per oz., gross, in addition to the general rates, and be imposed on all bullion deposited for coinage or manufacture, which will require toughening or extra refining to render it suitable for mint purposes.

ROBT. J. STEVENS, Superintendent.

J. B. KNAPP, WM. WADSWORTH, }  
 San Francisco, Cal. }  
 WM. S. BURNELL,  
 Portland, Oregon.

KNAPP, BURRELL & CO.,

Commission Merchants and  
 Jobbers of California and Oregon Fruit,

Produce, Leather, &c.,

No. 310 Washington street, near Front, San Francisco.  
 Orders and consignments solicited. au21-3m

## FOR SALE.

TEN DOLLAR LOTS; also 50-Vara Lots, and entire blocks of beautiful Garden land, on the line of the San Jose Railroad, at the West End Depot Title perfect,—being held under a patent from the United States.  
 Office No. 19, third floor of Naglee's Building, at the southwest corner of Merchant and Montgomery streets.

San Francisco Jan. 27, 1862.

HARVEY S. BROWN.  
 Fe15.

ORO HOTEL, Fire-Proof Brick Building, No. 49 K street, Bet. Second and Third, Sacramento City. Jas. Smith, Prop'r. my30

P. ROCCHICCIOLI, Electrotyper, and Silver Plater. 158 $\frac{1}{2}$  California Street, between Kearny and Montgomery sts. m1

J. PERRAULT, M. D., Physician and Surgeon, office in the Drug Store, 73 Davis street, between Washington and Clay. m8.

EDWARD F. OHM, Watches, Jewelry, Etc., 615 Montgomery street near Merchant. Watches and Jewelry repaired. m1

HOSTETTER'S  
STOMACH BITTERS,

They renovate, purify and strengthen the system, and aid the stomach in the performance of its functions. It is a sovereign specific for imparting strength, vigor and tone to the system, and possessing the curative powers for all diseases arising from a disordered stomach.

## DYSPEPSIA,

In all its forms, yields to its control and invigorating properties, and that its return is effectually prevented and the digestive powers preserved in the fullest vigor by a subsequent occasional use of this remarkable invigorant. The disease would seem to have an infinite variety of

## SYMPTOMS:

Among these are constant pain or uneasiness at the pit of the stomach, oppression after eating, spasms in the stomach and diaphragm, morning nausea, pain between the shoulders, fluttering of the heart, constipation of the bowels, irritability, broken sleep, nightmare, loss of memory, dimness of sight, prostration of strength, dull, stupefying headache, want of appetite, flatulency, and a feeling of despondency and despair wholly independent of external causes. All the evils in this mournful catalogue are not merely alleviated, but invariably removed, by a few bottles of HOSTETTER'S BITTERS.

## LIVER COMPLAINT.

Persons who languish for years under apparently incurable affections of the liver, the symptoms of which are pain in the right side, pain in the back and loins, a yellow suffusion of the skin and whites of the eyes, extreme indigestion to exertion, complete loss of mental activity, despondency almost amounting to mania, and great bodily weakness, all which are vanquished by the soothing and invigorating properties of this restorative.

TO PERSONS WHOSE HEALTH IS BROKEN  
DOWN.

When the flames of life wane and quiver from exhaustion, administer this famous restorative. It will once more become steady and strong. In the debility which follows violent fever, in diarrhoea, dysentery, dyspeptic complaints and cholera; in the weakness consequent upon natural decay, or resulting from free living or over-exertion, and also in those painful and too much neglected ailments to which ladies are exclusively subject, the Bitters never fail to give permanent relief.

## CALIFORNIANS

Should test the merits of Dr. Hostetter's Stomach Bitters. While it is highly palatable as a beverage, it is unequalled as a tonic and invigorant. In the pursuit of a fortune at the mines, many persons are exposed to attacks of complaints of the digestive organs, and of various kinds of fever. It is the very article that has so long been in demand at the mines.

## FEMALES.

Thousands of ladies resort to it as a remedy for hysteria, fluttering of the heart, nervous headache, vertigo, general debility and all peculiar disturbances and derangements to which, as a sex, they are subject. It cheers and lightens the depressed mental powers as well as strengthens the body, and its use is never followed by any unpleasant reaction.

## A WORD TO THE AGED.

In the decline of life, the loss of vital force consequent upon physical decay, can only be safely supplied by some vivifying preparation which recruits the strength and spirits, without entailing the exhaustion which is always the final effect of ordinary stimulants. It tones the stomach, improves the appetite, acts like a charm upon the spirits.

## BOTH SEXES,

Who suffer from general debility, without any physical pain or other symptoms of a deranged organization, will find great benefit from their vivifying influence on the frame and constitution; and where there is a deficiency of vital force they communicate the energy and vivacity which nature has neglected to supply.

The feeble girl, the ailing wife, the nursing mother, the overtasked man of business, the man of pleasure, under the reaction that follows over-exertion, and all who have a predisposition to paralysis, will do well to resort to this incomparable tonic and restorative.

## DR. HOSTETTER'S STOMACH BITTERS

Should be in the possession of everybody in the mining region. As a preventative against various diseases to which the gold seeker is liable, it has no superior. In all cases of Diarrhoea, Dysentery, and the prevailing fevers consequent upon exposure, the Bitters will be found invaluable as a corrective.

## COUNTERFEITS.

Counterfeits are said to be the homage paid by knavery to success, and from these left-handed compliments Hostetter's Stomach Bitters have not been exempted. Vile imitations of the article are abroad, and the public are earnestly requested to be on their guard against them.

Sold by druggists and dealers everywhere.

HOSTETTER, SMITH & DEAN,

Sole Agents for the Pacific Coast.

227 Montgomery street (Russ Block), San Francisco. [au28

The following letter, which emphatically speaks for itself, was written by the Dean of the Faculty of the Philadelphia College of Medicine, to the editors of the Pacific Medical and Surgical Journal, for publication:

PHILADELPHIA, January 17, 1862.

To the Editors of the Pacific Medical Journal—Gentlemen: My attention has been called to an article in the December number of your journal, in regard to the ad eundem degree granted by the Philadelphia College of Medicine to Dr. L. J. Czapkay. When the application for the degree was made to the Faculty, it was accompanied by affidavits and testimonials to the effect that Dr. Czapkay was a regular graduate M. D. of the University of Pesth, had served as a surgeon in the Hungarian army, and was a regular practitioner of medicine. On the strength of these the degree was granted. The ad eundem degree, as its name implies, is conferred on graduates only, and gives us new privileges. Had there been the slightest suspicion of irregularity, the application would have been refused. By inserting this in your journal you will do an act of justice to the College and confer a favor on

Yours, very respectfully,  
 H. RAND,  
 Dean of the Faculty of the Phila. College of Medicine.

DR. L. J. CZAPKAY'S Private Medical and Surgical Institute is on Sacramento street, below Montgomery, opposite the Pacific Mail Steamship Company's office, San Francisco. The Doctor offers free consultations and asks no remuneration unless he effects a cure. Office hours from 9 A. M. to 9 P. M.

CERTIFICATE.—I, the undersigned, Governor of Hungary, do testify hereby, that Dr. L. J. Czapkay has served during the contest for Hungarian liberty, as Chief Surgeon, in the Hungarian army, with faithful perseverance. Whereof I have given to him this certificate, and recommend him to the sympathy, attention and protection of all those who are capable of appreciating patriotic self-sacrifice, and undeserved misfortune.

KOS-SUTH LAJOS, Governor of Hungary.  
 Washington City, January 6th, 1862. jy25-

F. G. BEPLER,  
PRACTICAL COPPERSMITH,

No. 118 (Old No. 23) Bush street,

Between Sansome and Battery,

SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work.

All orders from the country promptly attended to. je6

I. C. E. KLEPZIG & CO.,  
GUN Makers,

AND DEALERS IN ALL

KINDS of GUN MATERIAL

Corner Battery and Oregon streets,

SAN FRANCISCO.

Opposite the Custom House,

Repairing done in a workmanlike manner at the shortest notice. jy25



## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

je20 JOHN WRIGHT, 511 Market street,  
 Opposite Battery, San Francisco.

## Homesteads Cheaper than Proposed under the Shafter Bill.

UNDER THE PROVISIONS of what is known as the Shafter Bill, it is proposed to sell the city title to homestead lot, for twenty-five to two hundred dollars each.

The undersigned will sell homestead lots within the limits of the city, and miles nearer to the business centre than many of the lands covered by the Shafter Bill, and place the party in immediate possession of the same, without present trouble or prospective lawsuits, for from \$10 to \$20 each. THE TITLE is absolutely PERFECT, being a Spanish Grant, finally confirmed and patented by the United States. The Shafter Bill respects this title: the city authorities respect it; the District Court and the Supreme Court of the State, as well as the District Court and Supreme Court of the United States respect it; besides the TITLE HAS BEEN FOREVER QUIETED BY A FINAL DECREE AND JUDGEMENT AGAINST THE CITY so that there is not even a cloud or shadow upon it. Whoever purchases one of these lots will buy a lot, not a lawsuit.

Office No. 19 Naglee's Building corner of Montgomery and Merchant sts. m22 HARVEY S. BROWN.

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts. m1

PALMER, HANSOM & Co. Golden State Foundry, and Machine Works. (Formerly Sutter Iron Works.) First street near Market. my23

D. R. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner. ap16

WIL & Co., Importers of Havana Cigars, Tobacco, Special Depot of Meershaum and German Pipes, 226 Front Street. m1

H. HOESH, Coffee and Dining Saloon, and Bakery No. 168 Clay street bet. Montgomery and Kearny. m1

C. W. THOMAS, Planing Mill, California street, facing the Mission R. R. Depot, San Francisco. m16

KELLY & WADE, Importers and Dealers in Paints, Oils, Turpentine, Etc. Nos. 105 & 107 California street, Bet. Davis and Front. m16

TANFORD BROTHERS, Pacific Oil and Camphane Works, Office and Store, No. 48 Front street, near California, San Francisco. m16



# Mining and Scientific Press.

A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, TUESDAY, OCTOBER 7, 1862.

NO. 3.

## TITLE TO MINERAL LANDS IN THE PACIFIC STATES.

For the information of capitalists in distant countries who have heretofore refrained from investing capital in our immense mineral lands, alleging that the laws of our States and Territories do not sufficiently guarantee security in the possession of mining property. To these we have a few facts to elucidate, which are based on the laws of the Federal Government, and the enactments of statutes of States and Territories, as well as local laws in every mining district throughout the Pacific Coast. The code of laws governing the right and title to mines on this coast, is precisely that of Spain and Mexico: the title to mines is vested in the United States Government; each State has the right to govern mining pursuits according to the general terms thereof, by enactments of local laws or statutes, and each mining district has the right to agree upon a set of rules and regulation, but these must conform to the general laws of the United States and the statutory laws of the State in which they exist; litigations and decisions are brought and adjudicated according to this system.

In so far as the peaceful possession of mineral lands are concerned, the Pacific States give ample security to citizens and aliens, and we doubt it much whether any European Government deals out equity and justice with more impartiality than do the Courts and Justices of the Pacific States. The few cases now before the Supreme Court of this State and the Supreme Court of the United States are fast becoming adjusted. The United States Government secures to every citizen and alien, individual and company, the right to take up mineral lands and work them, according to the terms and tenor of the laws and statutes provided. Since no landed proprietorship exists in mineral lands, no hereditary title can be acquired. In the State of California a law exists taxing aliens, entitled "Foreign Miners' Tax," which is \$2 50 per month. It has, however, been enforced only against the Chinese and coolies; and it has recently been declared unconstitutional by the Supreme Court of this State.

We know of but one serious objection why capitalists should fear to invest in our rich gold, silver and copper mines, and this may be summed up as follows: The pernicious system inaugurated here of establishing immense companies with thousands and millions of dollars for the stock, predicted upon the belief (not upon scientifically explored mines or mining districts) of reputed rich leads or veins, with the view of throwing upon the com-

munity a handsomely printed certificate of stock, without the shadow of security. And here we may remark that the laws governing mining companies or individual miners are not by half stringent enough, and very much requires amending. The amount of work to be done on mines to secure possession, is not enough, and special legislation must soon intervene.

The quartz mines in the Pacific States are chiefly worked by inexperienced persons, and when two or more parties intersect their claims or approach towards each other in their tunnels, endless litigation ensues, and oftentimes bloody contests result, thus ending with the destruction of much life and property. Special laws require to be passed either by Congress or the State Legislature, providing for a corps of mining engineers, geologists and mineralogists, whose duty it should be to examine every such claim in dispute, and their decisions should be evidence before the Courts.

Notwithstanding these disadvantages, which are merely the result of inexperience and circumstances, ushered into existence within the past few years, no country in the world has ever presented a greater field for acquiring wealth, as the Pacific States. The gold and silver extracted from one or two counties in Nevada Territory during the past year has amounted to over one million dollars per month; and, from present indications, it will not fall short of three times that amount in a year hence.

## A GOOD MOVE FOR POOR INVENTORS.

An excellent move has been made by one or more of our citizens to establish a scientific association and stock company, for the purpose of aiding inventors and discoverers in bringing before the public valuable inventions, which is to operate as follows: The society shall consist of a number of stock or shareholders, the amount of which shall be established at the adoption of the constitution, payable in monthly instalments or dues thereto. The association will after a sufficient amount has been paid in, acquire with this means all the apparatus, utensils, machinery, library, etc., requisite for making models, testing and making experiments, and complete the ideas of inventors who may not have the means to do this themselves. The association is to undertake, after a satisfactory examination of the invention, and obtain a patent therefor, subject to conditions made between the inventor and the association; and from the proceeds and emoluments of such inventions, the society expect to receive dividends, at the same time furthering the interest of the poor inventor.

On next Friday evening, at 8 o'clock, a meeting will take place at the Mechanics' Institute, when a full attendance may be expected.

## BAD MANAGEMENT IN CONDUCTING FAIRS.

We have repeatedly stated that the conductors or directors of State and district fairs and exhibitions, do very little towards encouraging science, arts and manufactures. It is a fact well established that thousands of dollars are made up in purses for the best cow, calf, horse, etc., which requires scarcely any science or skill to produce, when compared with a useful and novel piece of mechanism, which may have taken years of thought and labor to finish, and the application of which would cause economy of time, labor and profit. The most an artist or mechanic may expect for his skillful production, is a diploma, or a medal probably not worth \$5!

The various associations abroad have been noted for encouraging the sciences and arts; hence the mechanic and artisan have an incentive to produce inventions which will hand down his name to future generations, and the advantages arising from his production may prove beneficial to the whole human race! We can only account for this shortcoming by surmising that the mechanic and artisan are not solicited to take part in the organization and proceeding of such associations.

**CALIFORNIA QUICKSILVER.**—Without quicksilver very little gold could be obtained from the mines of any country. This metal is a most subtle searcher for gold. Quartz, in which not a trace of gold could be observed by the naked eye, has been made to yield \$250 to the ton of the genuine metal, and all by the quicksilver "licking it up" and forming it into a pasty mass. Quicksilver is to the miner what steam is to the engineer. California possesses extensive quicksilver mines, from which she not only supplies not only supplies her own miners, but furnishes the liquid metal in large quantities for the miners of many other countries. The exports of quicksilver from San Francisco since January 1st up to August 1st, have been as follow:

China, -	8,674 flasks	Peru, - -	1,258 flasks
Mexico, -	7,837 "	England, -	1,000 "
Australia, -	1,050 "	New York, -	625 "
Chili, - -	1,009 "	Vancouver, -	99 "

Total, - - - - - 21,552 flasks  
The Chinese use mercury for making that beautiful pigment vermilion.—*Bell's Nautical Magazine.*

**THANKS**—To our Honorable Representatives A. A. Sargent and T. G. Phelps, for Patent Office Reports on Agriculture.



## SUMMARY OF MINING NEWS



## CALIFORNIA.

A certificate of incorporation of the "Peninsular Mining Company" was filed in the County Clerk's office last week. The object for which it is formed is declared to be "the business of mining for gold and silver, and extracting the metals from quartz and sulphurets, and dealing in gold and silver mines, ores and merchandise." It is further specified that the principal place of carrying on said business operations will be "the scope of country known as Lower California, Republic of Mexico," and that the business office will be in the city of San Francisco. The time of its existence is placed at twenty years, and the amount of its capital stock \$480,000, divided into 480 shares of \$1,000. Its Trustees are seven in number, and their names are—Nathaniel Gray, Wm. Carman, R. J. Nichols, J. P. Ostrom, J. H. Atkinson, Hugh Logan and Nathaniel Page.

The "Santa Rosa Gold and Silver Mining Company," also, filed a certificate of incorporation in the County Clerk's office last week, which sets forth that it is incorporated for the purpose of extracting gold and silver from ores in Virginia district, Nevada Territory. The capital stock is placed at \$1,200,000, in 2,400 shares, of \$500 each. George A. Hudson, John Dykeman, Nelson Hudson, Gardner Elliott, and H. E. Green form the first Board of Trustees.

TEHAMA.—Mr. John S. Butler, brought to our office yesterday, says the Red Bluff Independent, two large specimens of a compound crystallized sulphur, alum and other mineral substances, a large basin of which mineral compound was discovered by E. R. Morgan a few days since at the head of Mill Creek, near the foot of Lassen's Butte. It is a singular compound, and, according to the description of the place given by Mr. Morgan, is worth a visit from the student of natural curiosities. Mr. M. says that immense beds of pure sulphur are to be found in that vicinity, as well as boiling springs and other wonders of nature.

NEVADA.—The Union company, composed of five Irishmen, working the bed of Deer Creek, a quarter of a mile below Soggs' mill, says the Nevada Transcript, took out a nugget on Thursday weighing fourteen ounces. The claims were abandoned in 1856, but now pay the workers ten dollars per day.

PLACER.—The assessment district of Auburn, Placer county, contains 68 square miles. The gold dug there in a year, according to the Assessor's estimate, is worth \$425,000, and is sold for \$16 50 per ounce on an average.

## NEVADA TERRITORY.

The *Silver Age* of the 5th inst, thus holds forth :

No one—not even the oldest residents here—could surmise their real extent or fabulous richness; no one yet can bring himself up to a just conception of their vast wealth now, or what they will be a few years hence. It is impossible, because there is no parallel or premises from which to reason. People are astounded that a desert country like ours, but three years ago almost uninhabited, now contains more than twenty thousand inhabitants; has cities of two and three thousand people; mills in great numbers, of unequalled size and productive capacity, and mines yielding at least twelve million dollars per annum, while nine-tenths of the really valuable claims are not yet developed. Our progress has been wonderful, but we, ourselves, cannot believe or surmise what mighty strides we will make in a few years to come. In three years we predict that our Territory will have a population of at least one hundred thousand; will have cities of ten thousand inhabitants, and produce bullion at the rate of fifty million dollars per annum. This may be extravagant, but we believe it will be rather under the mark than over it. No one can now accurately guess at the future magnitude of our progress, because not one in a thousand gives to the mines their true value, or adequately comprehend their vast wealth. As the truth gradually dawns upon the public mind there will be a corresponding expansion of ideas until the whole truth is revealed, or until the fountains of our wealth have astounded and bewildered even ourselves.

Considerable excitement has been manifest about the Clear Creek mines during the last week. The Georgetown Company have located the first north extension from the Porto Plata Co's claim on Porto Plata Lodes Nos. 1, 2 and 3. The Break of Day Co. have located the first north extension on the Gilead Lodes Nos. 1, 2, 3 and 4, the Syrian Lodes Nos. 1, 2, 3 and 4, and the Barcelona Lodes Nos. 3 and 4. The El Dorado Co. have located the first north extension on the Barcelona Lodes Nos. 1 and 2. The

Henry Clay Co. have located the first north extension on the Vesuvian Lodes Nos. 1, 2, 3 and 4, and the Old Town Co. have located the first north extension on the Mohamadan Lodes Nos. 1, 2 and 3. There are some fifteen tunnels now running into these mines about Clear Creek, and from the rock shown therefrom, and the fact that a steam mill is now being constructed for the purpose of reducing the ore, we are of the belief that good and reliable mines are found near to Carson City. We have seen an assay of Max Zorer No. 1 rock, showing \$76 47 in gold and \$1,232 42 in silver—\$1,338 89 per ton. Also assays from Max Zorer Nos. 2 and 4, which show from \$527 to \$550 per ton, and one assay from Mt. Moriah Lode No. 2 as high as \$415 per ton. These assays are all made from rock taken at from two to ten feet from the surface. These mines are only about three miles from Carson City, with a good graded road direct to them; having the advantage of water-power sufficient to propel thirty mills with one hundred stamps each; timber for the mines; lumber for the mills, buildings, etc., and thousands of cord-wood at from two to three dollars per cord—all about these mines, affording advantages which none others have in the Territory.

The mill, formerly Stewart & Hennings, is now owned by Messrs. Raymond & Thompson, who have torn out all the old apparatus and put eight seven inch tubs in, with a view of working ore by the "sage brush process." They have also two of Wheeler's new invention of amalgamators, which they have put up for the purpose of testing as to their adaptability and utility in saving metals both of gold and silver. We have the authority of Mr. Hess, a gentleman of much practical experience in such matters, for saying that they are not only a success, but are destined to work a complete revolution in the mode of amalgamating, throughout the silver mines. This mill is running from eight to sixteen of the twenty-four stamps, but has not tubs enough yet to put the mill to its full capacity. They took out 91 pounds of bullion last week; it was the product of 40 tons of the third class of Ophir rock. Such a rock was formerly counted as "refuse," but since the introduction of appropriate machinery and reliable modes of working silver rock, it pays remarkably well, and gives another assurance that we have millions of tons of pay rock in ledges partially abandoned, and in rock which has heretofore been "dumped" away as useless. The mill is now in excellent condition and will, undoubtedly, give good satisfaction to the owners and the public. Its capacity, when completed, will be about 25 tons per day.

The Ellsworth company's mine, situated about a mile south-east of Silver City, is turning out a large amount of good and some first-rate ore. In one apartment they got about three tons per day of ore that will pay \$150 per ton. This is kept by itself while all the rest goes to the mills just as it comes from the mine.

Mr. Welch has commenced work on the great Ophir tunnel, which is to strike the ledge one thousand feet below the surface.

ESMERALDA.—The *Star* of the 13th inst. says: Last week the following mining companies were incorporated, and the articles sent on to be filed in the office of the Secretary of State:

The first North Extension of the Winnemucca Gold and Silver Mining Company, 1200 feet; 1200 shares; capital stock, \$120,000. Trustees, Dr. John Ives, Geo. Smith and E. O. Taylor.

The Colonel Corcoran Gold and Silver Mining Company, 600 shares, \$60,000 capital. Trustees, P. G. Vibbard, T. McLaughlin and B. S. Mason.

The George Emmett Gold and Silver Mining Company, 600 shares; capital stock, \$60,000. Trustees, Dan. Morgan, B. S. Mason and P. G. Vibbard.

The Vibbard Gold and Silver Mining Company, 600 shares; capital stock \$60,000. Trustees, same as preceding company.

The Doyle Gold and Silver Mining Company, 600 shares; capital stock \$60,000. Trustees, John Doyle, B. S. Mason and P. G. Vibbard.

The Isaac Gold and Silver Mining Company, 600 shares, capital stock \$50,000. Trustees, Robert Isaac, B. S. Mason and P. G. Vibbard.

## Stock Quotations.

[CORRECTED WEEKLY FOR THE "PRESS."]

	SHARES	SHARES PER FOOT.	VALUE PER SHARE	BIDS.
Ophir .....	16,800	12	\$300	\$3800
Gould & Curry .....	4,800	4	500	2500
Central .....	1,800	12	300	1100
California .....	3,600	12	300	1500
Wide West .....	8,000	4	60	450
Sierra Nevada .....	3,600	4	300	150
Daney .....	2,800	2	500	175
Chollar .....	3,600	1 to 10 in	250	175
Potosi .....	4,400	1	400	190
Lucerne .....	10,000	1	500	15
North Potosi .....	3,600	1	300	20
St. Louis .....	5,000	1	100	10
Real Del Monte .....	2,400	2	250	30
Mount Davidson .....	10,000	3	200	25
Rogers .....	2,000	1	250	12

## Mineral Wealth of Plumas County.

Few, even of our own citizens, are fully aware of the incalculable wealth of Plumas county. In the early days of California the class of miners who came to this county, was in no wise different from that which diffused itself throughout the mining regions of this State. Placer and river diggings were all they sought after—each one was anxious to make his "pile" add then return to the Atlantic States—they came but to ravish the country and then desert it. But many, very many, soon learned to love the land they came to destroy. And these cast about them for a more permanent location than was afforded by the shallow surface claims, which could be worked out in a few weeks. Then it was that hills and deep diggings were tried—tunnels were run, and long ditches dug, at a great expense, for the purpose of conveying water along the sides, and even up to the tops of the hills; hydraulic power was used to detach the earth and debris from the precious metals; and a new era in mining was inaugurated. The Mount Pleasant, Spanish Ranch, and a number of other ditches of lesser note were constructed between '53 and '58, and the hills of Plumas were forced to surrender large quantities of their long hidden treasure to the industrious and enterprising miners and ditch owners—and Plumas was in a most flourishing condition until the Fraser River excitement broke out in the summer of '58, when many of our nomadic miners left their valuable claims to seek new fields. But the majority of those who left were in the condition of the dog in *Æsop's Fables*, which was crossing the stream on a log, with a piece of meat in his mouth, and seeing his own shadow in the water, let go the piece he had and jumping at the shadow, lost what he possessed and found nothing in return. Hundreds soon returned, and Plumas county began to be more thoroughly prospected. It now became evident that the numerous quartz lodes in which our mountains abound contained untold treasure. Washoe had been discovered with her fabulous wealth—and this gave a new impetus to this system of mining, and men turned their attention to developing the quartz lodes of our own county: their efforts have been crowned with such success that this county, at no distant day, is destined to become one of the most important mining counties in the State. Already the Eureka, Mammoth, Seventy-Six, and other quartz lodes, have been prospected and found to be rich. The Ellis ledge was discovered in Round Valley, and it was found to be but one of a great number of equally rich lodes in the same locality. Rich gold and copper lodes were discovered in Genessee Valley—and now we hear of new and valuable gold bearing quartz lodes being discovered at Rush Creek, Rich Bar, Taylor's Creek, Indian Valley, Nelson Point, Twelve-Mile Bar, and, in fact, nearly every other portion of this county.—*Standard*.

THE COLORADO MINES.—The area of the Colorado mines is extending, and is supposed to embrace the Apache country, in which event the white prospectors will eventually bring on an Indian war. The first mines are in the foothills skirting the Colorado river, and several miles from the stream. The gold is gathered by dry-washing, water being so scarce that it is packed from the river or from wells for drinking purposes, and sold for 15 and 25 cents a gallon. A town called Olivia, after Miss Olive Oatman, the Indian captive, has been laid out, and contains about a thousand inhabitants. Gold rates at \$16 per ounce, but is said to be worth \$19. A Recorder has been elected. No Chinese, Indians or negroes are allowed to take up lots. The new community may be regarded as the corner stone of a permanent settlement in that region.

The certificate of incorporation of the Moss Gold and Silver Mining Company was filed in the County Clerk's office on the 18th inst. Their mine is in Story county, N. T.

TANNING.—No less than 200,000 hemlock trees are annually cut down in the United States for tanning purposes



## Mental Epidemics.

In *Frazer's Magazine* for April, this year, speaking of mental epidemics, an article concludes thus:

The question of course suggests its If. What probability is there of a period of recurrence of popular delusions such as these to which we have here adverted? What security against them is afforded by extended education and advancing civilization? In our opinion, we do not hesitate to confess it, none whatever; not even were education as generally diffused as it's most ardent advocates would desire. It is at least a significant fact that Scotland and America, the two countries in which education is perhaps more general than in any other, have been foremost in these outbursts of fanaticism, and have rivalled or even outstripped Ireland in the length to which their extravagances have been carried. Most people have by this time surrendered the once popular tenet that superstition and fanaticism were to be forever dispelled by the light of science.

Education and so-called general enlightenment are, in truth, utterly powerless in the presence of spiritual emotions; even the growing skepticism of the day offers no bar to them, if it does not actually prepare men's minds for them. It is true that most of these delusions, of later years, especially, have been restricted chiefly to the lowest and least educated classes; but a little reflection can scarcely fail to force upon us the conviction that the higher and better educated have owed their immunity rather to accidental circumstances, and the peculiar forms which these delusions have assumed, than to any security conferred upon them by their position and mental cultivation against the grossest absurdities of credulity and superstition. Recent experience, indeed, has given much countenance to Dr. Babington's remark, that "among the educated classes the affluent are more credulous than those who are dependent on their own exertions for support." It is a point in which the extremes of society might be said to touch. The wilder forms of superstition and fanaticism have flourished at one end of the social scale—the scarcely less extravagant follies and absurdities of mesmerism, table-turning, and spirit-rapping, have found their dupes in the other: the intermediate class, the merchants, tradesmen, and, speaking generally, the members of the learned professions, in this country, at any rate, have been uninfluenced by either. We do not remember anything less creditable to the good sense and intelligence of English society than the belief in table-turning, so general a few years ago. Spiritualism, which bids fair to take its place, involves graver questions, though its pretensions appear to us to be abundantly refuted by its own monstrous absurdities. But we must not enter into this subject; possibly we may recur to it on some future occasion.

## The New Ironsides.

The iron-clad frigate is so far advanced that she will make a trial trip on Monday next, after which she will be taken to the Navy Yard and dismantled before proceeding to sea. On Saturday the engines of the frigate were in operation, and worked satisfactorily. Her machinery is of great power, consisting of two horizontal direct-acting engines, with cylinders of fifty inches in diameter and thirty inches stroke, intended to make 85 revolutions per minute, and to drive a brass four-bladed propeller, of thirteen feet diameter and eighteen feet pitch. The boilers are four in number, known as horizontal tubular, each being seventeen feet front, eleven feet deep and eleven feet high, of a collective force of 1600 horses. Though the boilers and machinery and coal bunkers occupy considerable space, there is ample room for the officers' quarters and the accommodation of the crew. The *New Ironsides* has but three decks—the orlop deck, in consequence of the high draft of the frigate, being dispensed with. On the spar deck the circles have been laid for the pivot guns, and the joiner's work is in a very forward state. A number of joiners are at work on the gun deck, fitting up the captain's quarters, which are spacious and well lighted. No other officer is allowed a cabin on this deck, but all, from the lieutenant down, are quartered on the berth deck. The cabins of these, with the ward rooms, are ready for occupancy. The total number of officers on board the *New Ironsides* is about thirty. These include the commander, lieutenants, masters, surgeons, chaplain, engineers, lieutenant of marines, midshipmen, master's mates, paymaster and clerk, boatswain, gunner and carpenter.

Though the *Ironsides* is the same tonnage as the *Wabash* she will not carry as large a crew, inasmuch as she is to be dismantled before going out. The armament of the frigate, consisting of sixteen 11-inch Dahlgren guns on the gun deck and two 200-pounder Parrott guns on the spar-deck, has been received at the yard, and will be put on board as soon as the iron carriages are ready. This week she will receive her coal and ordnance stores.—*Phil. Ledger, Aug. 4.*

**SNOW SPOTS ON THE EASTERN SLOPE.**—As an evidence that the last was an unusually severe winter, we may mention that large fields of snow are still visible from Carson City, a circumstance which has not occurred on the 1st of September for many seasons. Some places in these snow fields are said to be 20 feet deep yet, so that there is no probability that the snow will melt off this season.—*Silver Age.*



## EDITORIAL CORRESPONDENCE.

Tour through Sacramento, Folsom and Lincoln.  
PLACERVILLE, Sept. 15, 1862.

We left San Francisco elated with the hope of breathing once more the salubrious mountain air, and bid adieu for a short while to the bleak winds, sand and dust of our great metropolis. It has its charms as well as its ills, and we chose it "for better or for worse." The Chrysopolis, that floating palace, glides swiftly through the bay and up the Sacramento, where we arrived after a sound "snooze." The thermometer must have been 110° F. at the capital, which makes everybody puff and blow. Sacramentoans, despite their late reverses, seem buoyant and sanguine of their future; and that Eden seems again in its wonted splendor, abounding in luxuriant gardens and shade trees throughout the suburbs. After a short sojourn at the crack hotel, the Ebner House, we took leave of our friends, and "rolled on heavily" towards Folsom. Mine host, that social "cuss" of the Patterson House, received us well and hospitably. The insufferable heat does not seem to abate, and we were compelled to have recourse to our white donnings, which caused us immediate relief. Folsom, as will be seen elsewhere, is one of the most prosperous towns in this State, presenting many natural advantages to the enterprising; but its present population seem anything but literary, scientifically inclined, or willing to listen to matters pertaining to their benefit or advantage. Through a polite invitation, we attended the organization of a new Odd Fellows Lodge at Lincoln, Placer county, entitled Valley Lodge No. 107. The services occupied "all night till broad day light," with dancing and collation, wine and toasts. Lincoln is the terminus of the C. C. R. R., a very pleasantly situated town, seemingly in a prosperous condition. Stages in every direction wend their way from this point. Teams and conveyances are laden with freight and merchandise through the well-known forwarding houses at that place. Hotels and accommodations are ample. The surrounding country is thickly settled and the agricultural pursuits are flourishing.

We leave it, and take our departure for Placerville, El Dorado county, and the usual courtesies are denied us by that opulent stage company. We are somewhat disappointed at the bad state of the roads at this season of the year. Mining is being prosecuted with but little energy—here and there only are claims being worked: the majority have no water. Placerville is a splendid mountain city, surrounded by verdant hills and mountains, many of which are being worked for their metallic riches, paying handsomely to their enterprising owners. Although mining has been but superficially carried on, and is by many miners believed to be "played out," which is far from being a fact. Little work seems to be done with quartz, although it seems to abound in this vicinity, and would readily yield from \$15 to \$20 per ton. The Pacific Quartz Mill appears to be the only successful establishment of the kind here. The placers, ravines and gulches still pay moderately good wages where water is abundant.

The city of Placerville contains from 5,000 to 6,000 inhabitants. It is situated in a valley, divided into Upper and Lower Placerville. It is the entrepot of San Francisco and Nevada Territory, where all the travel and freight seem to form a centre and stopping place, and where the great trunk of the Pacific and Atlantic Railroad must come.

The great thoroughfare, Main street, is neatly laid out, and substantial buildings and edifices are studded symmetrically thereon, which for architecture and convenience do not fall short of San Francisco structures. We were agreeably surprised to find the Cary House the first hotel in this city, in every respect equal to the Lick House of San Francisco, in all its appointments. The affable proprietor, Mr. Cullen, has but recently returned from the Atlantic States, and is now the sole proprietor. This hotel contains 80 spacious apartments, capacious halls, beautiful parlors, dining saloons, etc., all of which are well ventilated, and provided with gas. The Cary House is a three story fire-proof brick edifice, situated on Main street, Lower Placerville. The chief business is carried on in Lower Placerville, where all commerce, exchange, postal and express matters are forwarded and transacted, and the stages and conveyances halt and take their departures.

J. S.

Mr. Lapone has just completed the erection of another quartz mill at the intersection of the ravines in Silver City, and just opposite the McNulty mill. It is presumed that the entire winter will be consumed in building this mill, and that it will be another of our first class productive agents.

## SUTTER PIONEER TESTIMONIAL FUND.

At a meeting of the Society of California Pioneers, held to celebrate the Twelfth Anniversary of the admission of California into the Union—

At the conclusion of the address of E. H. Washburn, Esq., Dr. Henry M. Gray remarked that as there was an unusually large number of the Society present, it was a fitting time to consider informally some important suggestions embodied in the remarks of the orator of the evening.

That portion of the address having direct reference to General John A. Sutter, then elicited an interesting discussion. Mr. Sam. Brannan then gave an account of a recent visit to the old Pioneer, and others warmly advocated the adoption of immediate measures for his relief. H. F. Williams offered a series of resolutions to this effect, to which some amendments were proposed. Subsequently the Society appointed Mr. Williams, W. B. Farwell, Dr. Gray and Rev. Albert Williams a committee, to revise the same, who reported the following, which were unanimously adopted:

WHEREAS, The Society of California Pioneers are desirous of presenting to General John A. Sutter a substantial mark of their attitude to him for his many good and charitable deeds towards the early settlers of the State, and of the esteem in which he is held by his fellow-citizens at large: therefore,

*Resolved*, That a committee, consisting of all the ex-Presidents of our Society, be, and the same are, hereby constituted a Committee to take the matter in charge, to appoint sub-committees, and prepare subscription papers, to be circulated for contributions to a fund to be judiciously invested for Gen. John A. Sutter.

*Resolved*, That the President, Secretary and Treasurer of this Society, and their successors in office, be, and the same are, hereby constituted a Board of Trustees, to receive and invest all funds which may be received in furtherance of this object.

*Resolved*, That copies of these resolutions be forwarded to all the newspaper editors in the State, with the request that they will publish the same, and urge upon their readers the propriety of contributing something in aid of the fund.

We have been requested by the Committee, and it affords us pleasure to give place to the above action of the Society of California Pioneers. It is understood that Gen. Sutter, the most distinguished of the early settlers of this State, has, through the generosity of his nature, and that unsuspecting probity which always attends on conscious worth, been deprived by the shrewdness and trickery of unprincipled men, of the ample competency which he had secured for himself and family, by his early toils, hardships and labors, in the settlement and reclamation of this country.—Insomuch, that his condition is now said to, be one of almost absolute want and destitution.

General John A. Sutter may be, in fact, considered as the Pioneer of California. It was he who received so cordially and treated so hospitably at his fort, on the Sacramento, the first expedition of citizens of the United States to this coast, made by Col. Fremont, in 1846. Fremont, in his Journal, speaks of him in highest terms of commendation. It is, therefore, exceedingly appropriate that the Pioneers should do him honor, and, if need be, give him aid in this his hour of trial and distress. He received and kindly fed and sheltered our worn-out and famishing countrymen, debilitated and exhausted by the sands of the desert and the snows of the mountains—at a time, too, when relief was salvation. It was also from him that much useful information was obtained by the first explorers, relative to the character of this country. It was, too, at Sutter's mill, it will be recollected, that the first gold was discovered in 1848; and hence the joyful news went forth which startled the nations, as it were, from the lethargy of ages. It was in digging the race at Sutter's mill that the first discovery was made which has in the course of twelve short years, placed California by the side of old and populous States.

Who, then, will not say, "All honor to the good old chivalrous Pioneer?" It may be well said that this State is more indebted to him than to any other individual in its wide circumference. We then say, God speed to the good work; and all honor to the noble Pioneers who have set this ball in motion.

**LACE MANUFACTURE.**—The growth and importance of this branch of industry may be learnt from the statements made by Mr. W. Felkin in 1856. He calculated that the returns from the Lace Manufacture exceeded £4,000,000 a year, the number of hands was 135,000, and of machines employed 3500. The machines are now estimated at 4,000. By the original mode of making lace upon the pillow, five meshes of "plain net" could be made per minute; 40,000 meshes per minute can now be made with ease. In 1813 the price of the finished pieces was 40s. the square yard; in 1856, 6d.



## LAND FOR THE MILLION.

If any man is in the possession of a tract of land of not less than 40 nor more than 320 acres of land, or knows where there are such tracts that he would like to purchase, that are not owned or possessed by any other person, the following information may be both useful and desirable:

The United States system of surveying divides the State into squares of six miles each, called Townships, and subdivides these into squares of one mile each, called Sections, as the following diagram will show:

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

By Acts of Congress, the 10th and 36th sections in each full township, and due proportions for the fractional townships, are donated to the State for common school purposes. And where the 10th or 36th section is included in a mili-

tary or other reserve, or in a private grant, the State has the privilege of selecting any other sections in the proper land district, in lieu of such reserved or appropriated sections.

By Act of the Legislature of this State, approved April 22d, 1861, sections 16 and 36 in each township, and other sections taken in lieu thereof, are authorized to be sold at the low price of one dollar and twenty-five cents per acre, in legal subdivisions of 40 to 320 acres.

When the purchaser desires, he can pay only 20 per cent. of the purchase money, and ten per cent. interest of the deferred payment, in advance, and the balance in one, two, three, or more years, as a future Legislature may determine.

In the San Francisco land district there are 600,000 acres of these school lands for sale; and, as over 200,000 acres of these sections 16 and 36 are included in private grants, other sections and parts of sections can be selected in lieu thereof.

If the particular township in which the land sought to be purchased is situated, has been "sectionized" by the United States, then all the applicant has to do is, to make application direct to the State Locating Agent in San Francisco, who has blanks for the purpose, containing the following certificate, which has to be verified by the applicant:

"I, \_\_\_\_\_, of \_\_\_\_\_, being duly sworn, depose and say that I am the applicant for the purchase and location of the above described lands; and that, to the best of my knowledge and belief, there is no valid claim existing upon the land so described adverse to the claim I hold and apply to be located; and that there is no improvement of any kind or description upon said land, other than my own."

A similar certificate, as to the claim to the land has to be made by two witnesses.

The application being signed and sworn to, the Locating Agent then makes application to the Register of the United States Land Office for the land sought to be purchased, and on his acceptance of the same, the application of the party and also the acceptance of the Registrar of the United States Land Office are forwarded to the U.S. Surveyor-General at Sacramento, who, on examination, and if found correct, approves the same, and returns his approval to the applicant, who, on its reception, and within fifty days from the date of the Surveyor-General's approval, pays to the Treasurer of the county in which the land is situated, either the full amount of one dollar and twenty-five cents per acre, or 20 per cent. of the purchase money, and 10 per cent. interest on the deferred payment as he may prefer.

If the quantity of land applied for is 160 acres,

and he prefers the 20 per cent. payment, it will be as follows:

160 acres, at \$1 25 per acre, is.....\$200 00  
20 per cent. of this amount is..... 40 00—\$40 00

Leaving a deferred payment of.....\$160 00  
And 10 per cent. on this amount is..... 16 00

Making the first payment for the year.... \$56 00

At the end of a year he pays \$16 more, and so on each year, until he chooses to pay the balance, or the Legislature shall direct it to be done by law.

In case the land sought to be purchased is situated in a township that has not been sectionized by the United States, then the person desiring to purchase makes application to the County-Surveyor or of the proper county, desiring him to make a survey of the particular tract selected; and when made he delivers to the applicant a certificate containing a plat and field notes of the tract, which he presents to the Locating Agent, and then the proceedings are the same as before.

The law requires that no less than 160 acres shall be applied for at the United States Registrar's office, yet two or more persons may apply at the same time to the Locating Agent for tracts of 40 acres, or more, that lie contiguous, and in the aggregate make 160 acres.

LEANDER RANSOM,

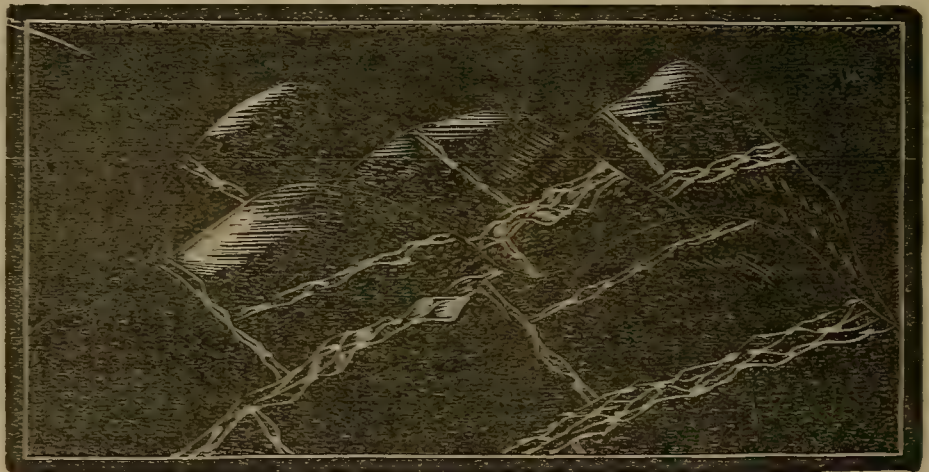
State Locating Agent San Francisco Land Dist.

materially augmented—a great amount of capital will be invested, and the miners, and the working classes generally, can find no better field than this new Territory. Humboldt district is coming out finely, and bids fair to exceed even the section known as Washoe. But bullock of any amount has not yet been received from that quarter. Esmeralda interests seem to revive with celerity.

## NEW PUBLICATIONS.

PANE'S AGE OF REASON REVIEWED, by Wm. H. R. Wood, Esq. This little pamphlet purports to be a defence of Christianity against the attacks of infidelity. The author reviews the subject with considerable ability, but we doubt much whether he can win back the unbeliever who reasons, by means of arguments he may bring to bear against such a work as that which he attempts to refute.

NEW LAW JOURNAL.—A new octavo pamphlet, entitled *California Law Journal and Literary Review*, made its appearance yesterday (Monday). Dr. Wm. H. R. Wood is the editor. The people of California, certainly, cannot complain of lack of reading. Three or four periodicals have sprung into existence within the last fortnight. We can scarcely believe all these publications will be sup-



SEAM DIGGINGS.

The annexed illustration presents a rough idea representing the mode of mining in hill seams bearing rich deposits of gold. In the county of El Dorado, at a place called Spanish Dry Diggings, in the foothills of the Sierra Nevada, immensely rich hill claims have furnished fortunes. The nature of the deposits is simply corroded quartz of an opaque color, ranging from red to black, and remarkably soft and friable. The fissures or veins run at about an angle of 45°, and lay parallel to the layers of quartz or rocks composing the hills. A strange feature particularly observed is, that the veins on the western side of the hills are only metallic bearing, while those on the eastern side are entirely devoid of metals. In the year 1859, two Kentuckians realized 65 pounds of nearly pure gold per day for a period of ten days. Mr. G. W. Hunter is now the lessee. Several important claims are located in this district. Mining is carried on by making tunnels in the direction of the seams, and the ore is then washed into the sluices. Dr. Stone, of Georgetown, is the proprietor of the dig company in that district. Among the noted claims are—Mr. G. W. Hunter's claim, the Griff claim and the Pennsylvania claim, all of which are doing well.

## THREE MILLIONS OF BULLION PER MONTH!

The Territory of Nevada, that great and wealthy gold and silver spot, scarcely marked on the geographical maps of Europe, will furnish no less than \$3,000,000 in silver and gold per month shortly. From the number of companies and associations recently formed in this State and Nevada Territory, the amount of bullion must be

ported: the sale for the best of them must be limited: if they compensate for the money, time and labor necessarily expended on them, they will do better than we anticipate. In fact, we lack the population. Of our 500,000 inhabitants, only one-hundredth part are strictly a reading class—and the majority of these are amply provided with Atlantic and European journals. Besides, every county in the State has an exponent in the shape of a newspaper, many of which are ably edited.

LINCOLN, PLACER COUNTY.—A few days since we visited this prosperous town, it being the terminus of the California Central Railroad. The town is symmetrically laid out, and promises to become the city of Sacramento Valley. Commercially speaking, Lincoln presents many advantages over other noted places in the vicinity of Sacramento, and the leading forwarding and commission houses seem to be up to the importance thereof. Already the current of freight is wending its way in that direction, and the amount of travel is considerable. Stages leave there for every direction in the State and for Nevada Territory. We should like to hear of the finishing of the railroad to Marysville. When this shall have been accomplished, we bespeak for the people of Lincoln a great achievement.

THE NAUTICAL MAGAZINE, by Capt. Bell, is out for October. It discusses some interesting matters pertaining to nautical affairs—commerce, insurance, and instruction to seamen.

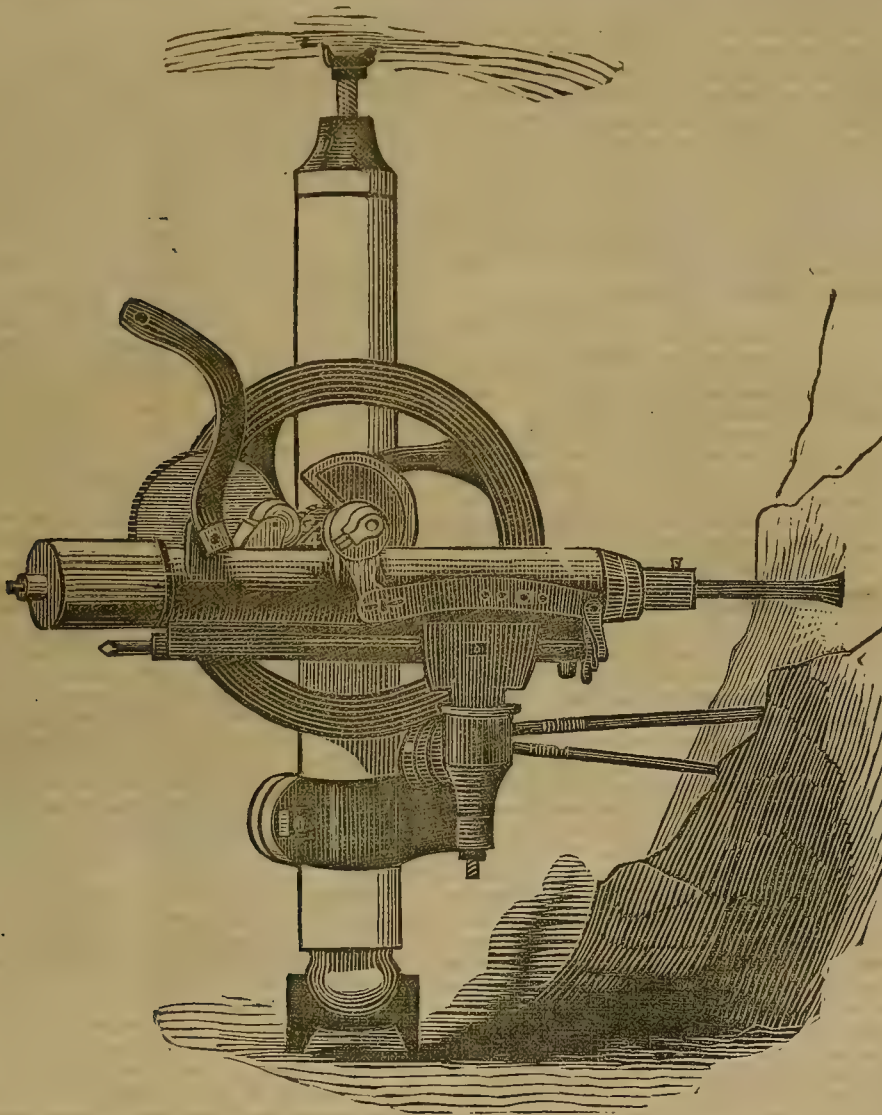


WM. W. DUNN'S PATENT ROCK DRILL.

The accompanying rock drilling machine is an ingenious invention, particularly valuable to the quartz miners on the Pacific Coast. The engraving, though coarse (it not being executed at our office), yet presents the machine sufficiently plain and comprehensive. The inventor is Mr. Wm. W. Dunn of this city.

One man with this machine can do the work of about four men in the ordinary way. It is portable, made entirely of iron, and weighs about 80 pounds. Its principal use is in mining operations. Placing the machine in the shaft or tunnel by screwing out the screw on the end of the expanding stanchion on which it is supported, and thus bracing it firmly between the top and bottom, or

one end—with, at the other end, standards supporting the drilling machinery, by which the drill can be operated horizontally, perpendicularly, or in any direction. The drill has a regular turning motion, at each blow, feeds forward fast or slow, (at the option of the operator,) as the character of the rock requires: the rate of advance can be varied instantaneously. The blow is struck by the drill being drawn back by cams, thus compressing a cylindrical indiarubber spring, which expanding projects it with great force. The number of blows per minute is only limited by the durability of the steel drill, 120 blows is the usual rate. These machines can be operated by hand, horse or steam power. A 4 horse power engine operated by one man drives a machine capable of drilling 4 to 6 inch blast holes, 4 feet deep in



sides of the tunnel, one man can with ease work the machine and turn the crank 40 times per minute, and the drill strikes three blows for each turn, giving 120 blows per minute. This machine has been successfully tested in the Eastern States and this State, where the hardest rocks abound.

This machine occupies so little space that in a tunnel five feet square two of them can be worked, equivalent to eight men, when but two can work in the ordinary way—not only a great saving in cash expenditure, but also of time, is effected.

A one horse power machine performs the labor of 12 men.

Mr. Dunn is also the agent for Mr. Gardner's patent of a portable steam engine, to be used in connection with the above drill. It consists of a truck frame on wheels, bearing a steam engine at

granite, or 6 feet in hard limestone, per hour.

The cost of drilling the holes is reduced to one-tenth the present expense, while the whole saving on a rock excavation of any extent, cannot be less than 50 or 75 per cent, on the entire work.

The one horse power machine performs the labor of twelve to thirteen men, in driving bed-rock tunnels and open cuts. It is worked by atmospheric pressure and ventilates the tunnel at the same time.

The hand drill is another form of machine, by use of which one man can do the work of three. It is expressly adapted for tunnels, galleries, shafts, etc.

For particulars address Wm. W. Dunn, Fremont street, near Market, San Francisco.

TO MINING COMPANIES.

We earnestly solicit from mining companies and associations the following blank statement, filled according to the data hereby accompanying. The purpose for which we seek this information is important to every citizen and stockholder on this coast; it would also be productive of beneficial results—i. e., inducing capitalists to invest in our mining operations, thereby infusing new life and vigor into business generally in our States and Territories. Little, if anything, is known of our metallic wealth in Europe or the Eastern States, hence we desire as much of the blank filled by you as may be interesting and instructive to the people of this State and those interested abroad.

We know of no mining district in Europe or America where this kind of information is not willingly rendered by parties owning property of this nature; and we know of no better medium for making public the richness of our mines. We shall send blanks to mine and mill proprietors for every quarter, and will gladly publish the contents for the information of the community:

Title of Company and names of officers for the year.	Am't of stock & value per share.	When incorporated
--	----------------------------------	-------------------

Location.	Average assays of ore.	Process employed and number of stamps.	General remarks.
-----------	------------------------	--	------------------

Routes and Fares from San Francisco to Foreign and Domestic cities.

*Pacific Mail Steamship Company*—Steamers leave for New York via Panama, on the 1st, 11th and 21st of each month. 1st cabin, \$250; 2d cabin, \$200; 3d cabin or steerage, \$100.

*Nicaragua Steamship line*, Rosa, Dempster & Co., agents. —Steamers leave for New York via isthmus of Nicaragua, on the 21st October, and semi-monthly thereafter. Price of fare not yet stated.

To Portland, Victoria, &c., \$60. Crescent City, Trinidad, &c., \$20 \$30. San Diego, Monterey, and Los Angeles, \$20 to \$30. Sandwich Islands, per sailing vessels, \$100 to \$150. Australia, sailing vessels, 1st class, \$250 to \$300, China and Japan, sailing vessels, 1st class, \$200 to \$250. Mexico, \$30 to \$50.

*California Steam Navigation Company* dispatch steamers daily to—Sacramento, \$5; Stockton, \$4; Petaluma, \$3.

*Overland Mail Company*—Stages leave daily for St. Louis via Salt Lake; fare, \$200.

THE NORTH PACIFIC REVIEW.—This quarto monthly made its debut on the 1st inst. The work is neatly printed; it contains a well executed and life-like engraving of the late James Donahue, Esq. The reading matter, both original and selected, is choice, and will prove interesting to the general reader.

LEANDER RANSOM,  
CIVIL ENGINEER  
AND SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public works of the State of California for 7 years.

ALSO, STATE LOCATING AGENT.

And as such having the sale of  
600,000 ACRES OF THE STATE SCHOOL LANDS,  
At the low price of \$1.25 per Acre.

Terms—Twenty-five per cent. in cash, and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California, streets. oct-3m

JULIUS SILVERSMITH,  
COMMISSIONER FOR NEVADA TERRITORY.  
OFFICE, IN LATE STATE CAPITOL,  
Corner of Battery & Washington sts., Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE WHO HAVE BUSINESS relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

STANFORD BROTHERS, Pacific Oil and Camphene Works, Office and Store, No. 48 Front street, near California, San Francisco. m16



[From the Silver Age]

Letter from our Commissioner to the World's Fair.

The following letter has been received from the Commissioner of Nevada Territory to the World's Exhibition, London, by his Excellency Governor Nye, to whom we are indebted for a copy for publication. It will be remembered that our Legislature at its last session made an appropriation of five hundred dollars to defray the expenses of a Commissioner to represent our Territory at the Great Fair; a sum insufficient, as was understood at the time, to cover the cost of travel alone, to say nothing of the other expenses of any one undertaking the journey. But our Legislature, in view of our many home wants and the slender revenue of the Territory, did not feel warranted in making a larger appropriation at the time. That it would have been good policy to have sent on at least two or three well selected men accredited to that mission can hardly be questioned, judging from the tenor of this letter. Finding no other competent person willing to make the journey at so great pecuniary sacrifice, Governor Nye appointed Mr. Joseph Mosheimer to the Commission. The selection was a good one, this gentleman being an old resident of Washoe, and thoroughly acquainted with its wants, resources and future prospects, besides being a practical metallurgist and owner in our mines:

LONDON, June 22d, 1862.

Gov. J. W. NYE—*Dear Sir:* In my last letter to you I mentioned my visit to Washington, after which I proceeded without delay to my place of destination, arriving here on the 15th May. My first business was to ascertain who were the American representatives at the Exhibition, and found Mr. Holmes Acting Commissioner for the whole Department, which consisted of a place in the eastern corner of the building about the size of the Contra Costa Agricultural Rooms. Mr. Holmes endeavored to procure more room but without success. I found it difficult to get sufficient space wherein to place a glass case containing my Washoe collection of ores. I found some specimens of ores from our Territory already here, which together with my own made a very creditable show; and, I think, we can justly claim to have surpassed our mother State of California in this respect. She sends on three Commissioners, and has on exhibition only a small pump from Mr. Hansbrow, of Sacramento. The ores I have on exhibition are from the Ophir, Mexican, Gould & Curry, Chollar, Gold Hill, Sacramento Ledge (Silver City) and the Daney—being some of the richest samples ever taken from these mines. I have also a large specimen taken from one of the leads in the Esmeralda district, and a number from Humboldt. They excite much curiosity here, attracting the attention of moneyed and scientific classes in a special manner. Sir Rodrick Murchison, the first geologist of England, was much interested in the collection, and invited me to his house to have a talk about our Territory. Two days ago the Prince of Wales came to our court, and Sir Wentworth Dilke showed him our ores. I opened the case, handed him the several samples and explained to him their character. He examined them with care, thanked me for my trouble and departed, bearing himself in the most modest and unassuming manner.

It is a pity, both for the credit and welfare of our young Territory, that certain parties largely interested in her mines, did not see fit to act more liberally in the matter of sending on samples of ores and otherwise giving encouragement to the Exhibition. As an excuse for this narrow course of policy, the president of one of our mining companies assured me that he did not think it expedient to let the politicians have much light in regard to the riches of their mine. There are those, however, who would be greatly benefitted by having the value of their claims duly understood abroad.

Silver mining is awakening more interest in this country now than ever before. They have more confidence in it here than in gold mining, in which many were heavy sufferers by their trials in California.

The question is often asked what title have we to our mines. On being assured that they are on

Government land, every one is satisfied. They are afraid of the Spanish titles which have caused so much trouble in California. I am surprised to find how little is known about our Territory, not only here, but also in the Eastern States. They cannot credit the statement that we take out about a million dollars' worth of silver every month. This is because so little is said about the matter in the public prints, and all the precious metals raised in the Pacific States is accredited to California. There has been but little published about Washoe whereby the monetary and scientific world could be intelligently informed. Were our resources and situation well known here we could readily command the means for building a railroad to California, as well as all needed capital for opening and working our mines—a condition that would greatly increase the value of every species of property in the Territory. To illustrate how little is known of our progress, even among intelligent classes here, I may mention that I found it difficult to convince a gentleman who had examined our mines in 1861, that we had now fifteen hundred stamps running; because, as he said, it would take years to accomplish this. I only convinced him by showing a list of the mills now running or in course of erection in the Territory. There is not much useful machinery for mining purposes on exhibition here, and I am of opinion we could teach these people something in the business of gold working.

I am your Excellency's ob't serv't,

JOS. MOSHEIMER.

From the Coso Mines.

We copy the two subjoined letters from a late number of the *Visalia Delta*:

WILLOW SPRINGS, COSO, Sept. 15, 1862.

EDITOR DELTA:—I notice from your paper that the people of Tulare Valley have finally aroused to a sense of duty and interest by commencing a trail across the mountains from Visalia to this place, and other mining localities in this vicinity. It is only surprising that they have not done so long ago, for every observer must have known that Tulare Valley is the natural market for this whole country, if the roads and trails were made passable for freight trains and teams. The trade from the different mines on the Eastern slope is fast growing into importance and must, from all appearances, soon be immense. Large amounts of goods, &c., now come to us by the way of Los Angeles, which naturally should pass through Visalia.

The Coso mines are opening out in the most satisfactory manner. The Josephine lead has a shaft sunk on it about 75 feet deep, and the vein is much larger and richer at that point than any place above. There is no doubt that this vein is exceedingly rich. The Winoshick, Watab, Caledonia, Decow, Great Eastern, Great Western, and many other leads in this district, are turning out remarkably well. To work these successfully, silver machinery is necessary, and Mr. Hitchens, the owner of several of them, and the proprietor of the Pioneer mill in these parts, has started to San Francisco to procure a "process" and pans which will save the stuff that our veins doubtless contain.

The Lotta mills are doing a fine business crushing Josephine rock. Hitchens' mill is principally used in prospecting the various leads which are being opened in different parts of the mines—some of which will be heard from soon in a manner to astonish the oldest man in the community.

The Indian troubles have finally ceased to scare the timid or to retard our progress, from the fact that a military post has been established on Owens' river, and we all feel secure in our lives and property and the pursuit of happiness.

The news from Owens river is encouraging. The Union mill has started, and all looks well. Persons continue to arrive daily from the Slate Range and Argus districts, who bring with them unmistakable evidence of the boundless wealth of these places.

From the signs of the times, next summer will be a lively season on this side of the mountains—the sound of the quartz mills will be heard in one continuous clatter from one end of the range to the other, and the returns of the express men will

show that Tulare is not only the finest agricultural and grazing portion of the State, but that her shines are unsurpassed in any quarter.

Coso.

WHITE RIVER, Sept. 16, 1862.

MR. EDITOR:—Thinking that you may wish a little more information in regard to the extent, richness and locality of the late discovered gold mines (in quartz) on the north fork of Kern River, I embrace this opportunity of affording you all I can from actual observation, and from what I have heard from others on the ground. Shakspeare says "there is a tide in the affairs of men," &c. How beautifully true. It is an ever rushing current, which some try to stem, while others glide along in its eddies or down stream with ease, to that final destiny awaiting us all—no matter how good or bad the result, in the estimation of those who live, they must acknowledge the equality of the bone-yard: for with all our greatness we leave but little shadows behind. But whether it was flood or ebb tide that rushed me from the classic shades of Tailholt, over the rugged and romantic cliffs of Kern River, the future must determine in this letter. Perhaps it would be well to give you a description of the country passed through before reaching the mines, together with the events that incidentally transpired in a trip through a country so little known, even among ourselves, although perhaps of but little importance.

The first place of note after leaving White river is Linn's Valley, which shows unmistakable evidences of the late deluge. Acres which were last year covered with grass, are now strewn with drift wood and buried in sand. Still that does not mar the beauty of the valley, nor depreciate the value of the farms much. A change has also come over the spirit of its industrious and frugal inhabitants, for this year, at election, they gave a Union majority, where last year it was furiously and bitterly secesh. So much for the dawning light of civilization. The road completed last year by the Linn's Valley people over the Greenhorn mountain, is at the present impassable for wagons. Marsh's mill on the top of the mountain, is partially destroyed, and whether they will ever use it again for crushing quartz or not, is uncertain, as quartz mining in the neighborhood is for the present suspended. The view of the surrounding country from the top of the second summit, going towards Kern River, is grand. The river winding along through deep chasms, the mountains and abrupt declivities looming up towards the heavens, and covered with stately and silent pines, impresses the mind with the grandeur of nature and the power of God, and makes a picture impossible for pen or pencil to describe.

Greenhorn went Union this year—another change. The road from Greenhorn to Keyesville is very rough, though I passed people taking wagons with them and going to Owens River, and, from some little and big domestic evidences they had along with them, I think they will be comfortable over there. Upon my arrival at Keyesville I could not but notice the silence of the city, especially after living in the busy city of Tailholt. The cause is said to be the fact that all the inhabitants belong to the Good Templars. There are several business houses in Keyesville, also two hotels, at one of which I put up, without being asked if I had any baggage, or to pay in advance before sampling their hash. A liberal style—though in some places the landlords would consider it dangerous.

Now for the mines. After going up Kern river from Keyesville about nine miles, the first evidence of the new mines that attracted my attention was the quartz mill of Rogers, Caldwell & Co., on the north side of the river—a water mill. They were cleaning up the battery when I arrived, and obtained some thirty pounds of amalgam from rock crushed in four days, which I think is very good, considering that the capacity of the mill is only about three tons in 24 hours. The gold is worth \$15 an ounce. The rock has to be burnt before it is crushed to obtain the gold from it, as it is full of something that prevents the quicksilver from taking hold of it, unless it is burnt. [Sulphur, probably.—ED.] The most of the leads are within half



a mile of the mill of the first discoverers, but some are about two miles above and below. In the vicinity of the veins a person becomes surprised and interested to see such masses of rock on the surface, which have been walked over by the miners for years, without examination, for the reason that no quartz miner ever dreamed such stuff contained gold. It does not look like quartz, although the veins are well defined on the surface, and perpendicular, and varying from one foot to forty feet in thickness. The small veins, which they are now working, pay from \$100 to \$300 per ton. The 40 feet vein prospects, from three different runs of rock, \$16, \$19 and \$22 to the ton, across the vein. The rock is blue, close grained, and filled with grey sulphurets. The workers of the mines find it impossible to select the rock, as they would be as apt as not to select the poorest for the richest. One cannot see gold in the rock until after it is burnt, and little then. Men who are experienced in quartz mining say it pays more regularly than any rock they ever saw. Time and labor will develop the permanency and extent of the mines there, and if they run deep and continue the same in richness and thickness, this will be the richest quartz district in the State. The veins are all close to permanent water privileges. There will be three mills in operation before spring, put up by the owners of veins here, and I think it is a splendid opportunity for a company to put up a mill to do custom work, as there are thousands of tons of good rock in sight. They are continually finding new leads, which shows that there is still a good opportunity for prospectors. The prospects at Coso, from reliable authority, is really beyond the expectations of the most sanguine. No more at present.

YACOB.

### The Cary House, Placerville.

We present herewith an illustration of this first class and splendid hotel. This edifice was erected by Mr. W. M. Cary in 1857, and is eligibly situated on the corner of Main and Quartz streets. Eighty commodious, well ventilated, well



lighted and finely furnished apartments, with fine parlors, dining saloons and halls, are offered the traveling public. It is most centrally located, and adjoins Wells, Fargo & Co.'s Express, and is near the Post Office. John W. Cullen is the most affable and accommodating of hotel proprietors. Stages and conveyances leave daily from this house to all parts of California and Nevada Territory. The greatest care and attention are shown to the patrons of the house, and we found the terms as reasonable as could be desired.

**CURIOUS PETRIFICATION.**—The *Panama Bulletin* tells this curious story:

"It will be recollected that about four years ago, Mrs. Kearney, wife of the late Mr. James Kearney, died in this city. Her husband, at that time being a merchant in Aspinwall, had a zinc coffin made, in which she was placed, and also a quantity of alcohol, the whole then imbedded in charcoal, in a still larger coffin, for the purpose of preserving her, as it was her husband's intention to have her sent to England; but shortly afterward he took sick himself and died, and also his child. The body then remained in the cemetery undisturbed, until a short time ago, instructions were received from her relations in England, to have the body exhumed and interred in the cathedral. On opening the coffin the body was found to be petrified and perfectly marble-like, but, strange to say, as quick as the air got to the body it changed to a light copper color."

An egg was opened in Grass Valley recently, which contained within its white portion a smaller egg, fully formed and with a shell on it.

**THE INDUSTRIAL SCHOOL.**—The Fourth Annual Report of the Board of Managers of this institution is before us. It contains many features of interest to the citizens of this city as well as the State at large. There are at the present time 52 inmates, being an increase of 22 over last year, "thus proving that the class of boys and girls for whose reformation the Industrial School was created, is numerous in our city." The causes of commitment are: Leading an idle and dissolute life, 40; petit larceny, 9; vagrancy, 2; grand larceny, 1. That it is working well, it need only be mentioned that with the increase of 22 the expenses have been but little above the past year; and while the number of escapes was last year 16, this year they only amounted to 3. It seems, also, that they have found the correct stimulant to encourage good behavior, that of rewarding the obedient with confidence. And we believe it is the experience of all teachers of the young that without confidence in the pupils, success is impossible.

While we have schools for the man of letters, the merchant, the navigator, and in some instances the agriculturist, none for the encouragement of scientific mining is on our coast, though of all countries here, where our main wealth is minerals, scientific mining instruction is most needed. Why should we not have this branch taught to the growing up youth? This, with the subject of industrial schools, should engage the attention of the instructors and supporters of the rising generation.

**RECLAMATION OF SWAMP LAND.**—The *Stockton Independent* says of Mr. Carpenter, a farmer in the swamp land of San Joaquin county:

He has been experimenting with levees and ditches for the last five years to protect his land from the annual overflow of the Calaveras, and finds it as necessary to have inside ditches or drains to carry off the rain water as to have levees or embankments to keep off the overflow. He runs his embankments in straight and parallel lines—one through the centre and one on each side of his land subject to an overflow, and makes them three feet in height by twenty feet in base. These embankments are used as roads in wet weather when the surrounding ground is boggy and impassable for horses.

Mr. C. says the water will find its way, to some extent, through the oldest and best levees, and that new levees are of but little use the first year. It requires immense labor and patient industry to reclaim the low, flat land on the lower end of the Calaveras; but Mr. Carpenter is not only setting a good example to the owners of such fields by the exercise of good judgment in bringing it under tillage, but is laying the foundation of an independent fortune.

A certificate of incorporation for the Banner G. & S. Mining Company was filed last week in the office of the County Clerk. Its object is to conduct the business of mining on a certain vein or ledge known by the name of the Last Chance Hill Vein, and located in the Esmeralda mining district. Its Trustees are—John W. Tucker, Gardner W. Case, A. F. Mitchell, George W. Funk and Henry Howard Welch. The term of existence is placed at 50 years, and its capital stock at \$800,000, divided into 2,000 shares.

### Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent Right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

As we have also now associated with us in our business Wm. H. R. Wood, Esq., whose well known legal acquirements, and practical care, punctuality and correctness, eminently qualify him for business of this kind. Dr. Wood also acts as general agent for all persons having business to be attended to either in this city or Washington city.

**HUNTER'S GRAIN SEPARATOR.**—We saw this new invention in operation last week, and it performs the work in a thorough manner. It is calculated for separating any kind of grain, but is more especially adapted for wheat. The wheat to be cleaned on this occasion contained a large quantity of oats and chaff; and after passing it through this machine it was quite clean. The grain to be cleaned and separated is poured into a long trough at the top, and from thence passes down two inclined planes which are moved with a uniform motion from side to side by a crank. The upper plane has four compartments, one over the other, which are pierced with holes. The oats and barley in the wheat pass off into a box at the further end; and the wheat and chaff comes down in front—the good clean wheat falling into one box, and the small stunted grains and chaff into another. Bags are hooked under these boxes, and as soon as filled are taken away and supplied by others. There is no waste in the operation. 600 sacks of wheat can be cleaned in a day by the large machine which is now in operation. Mr. Hunter is now building separators of a convenient size for farmers' use which will cost \$100—and we could see that it will be a very useful machine for them. Every farmer is anxious to bring his wheat to market as clean as possible, for the price he will get for it will be in proportion thereto. By this machine he is enabled to bring not only a clean article, but a good article, for it will have none but the good plump grains. The imperfect and broken grains and chaff make excellent chicken feed; or ground, it is considered equal to barley for horses. It is a California invention, devised by a practical farmer, and was patented in 1861.

### Gird's Budding Knife.

This invention is one of the many California has thus far produced, and is certainly deserving of her, it being the most useful and practicable for the purposes designed. The horticulturist who once adopts this knife will find its value so evident that ever after its services will be indispensable, since with it much labor and expense are saved. In speaking of it the *Scientific American* says:

"The above engraving illustrates a knife which is calculated to facilitate materially the process of budding. Upon the ends of the blades are formed crescent-shaped crosses of steel with fine edges for cutting the T-shaped slit in the bark of the tree to be budded. These blades with their crosses are made of different sizes, so that some one of the three may be adapted to the size of the tree to be operated upon."

"It is the practice of some horticulturists to remove the bit of wood which is cut from the scion with the bud, and to insert the bark only with the bud. To save this operation, the round blade is formed with several curves in its edge, so that it will cut the bark alone from the scion without taking off the bit of wood, the curves being of different radii to adapt them to scions of different sizes."

"With this knife several operations are reduced to one, and the process of budding is greatly facilitated. The crescent-shaped cross is pressed through the bark making the transverse cut, and then by simply carrying the knife down, the vertical slit is made, and the bark is raised at the same time ready to receive the bud. This knife was used in California during the last season, for budding several thousand trees, and it gave great satisfaction to the operators."

Those desiring to purchase will please address Julius Silversmith, San Francisco, respecting terms, &c.

**STOCK AND EXCHANGE BOARD.**—A regular Stock Brokers' Board, upon the same general plan as those of the older cities of the Eastern States, has been formed in this city. The necessity for such an organization in San Francisco at present, does not seem to be very urgent, but the rapid increase of stock companies warrants the belief that the stock brokers may have enough to do hereafter. The officers of the Board are: J. B. E. Cavalier, President; E. W. Teackle, Vice President; Franklin Lawton, Secretary; Henry Schmidell, Treasurer.—*Call*.

The *Deseret News* states that a cotton mill has been built at Parowan in that Territory, and that some of the machinery has been put up and is now running. A considerable quantity of cotton is now raised in southern Utah, and it is for its manufacture into cloth that this factory has been erected.



## Mining and Scientific Press.

J. SILVERSMITH, Editor.

TUESDAY.....OCTOBER 7, 1862.

The MINING AND SCIENTIFIC PRESS is published at the State Capitol building, Rooms 23 and 24, corner of Battery and Washington streets San Francisco, Cal., by

J. SILVERSMITH, Editor.

At FIFTY CENTS per month, or \$4 per annum, in advance.  
Advertisements, Fifty Cents per line.

## Engravings, Electrotypes, etc.

WE execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates.

PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## OUR MINES.

We have tried in vain to find out how our mines are paying. 'Tis no use, our miners won't tell.—*San Juan Press.*

This conduct has ever characterized California, and may continue for an indefinite period hereafter, until the Government shall enact laws for collecting revenue from mining sources. Though we are far from advocating such a measure, yet we cannot with due deference to our almost impoverished Government, withhold the fact that many are now taking out their thousands from placer mines, &c., without paying an adequate proportion of the taxes, as compared with the trader and mechanic. We should not be surprised to learn when Congress convenes in 1863, that an effort will be made to pass laws for the sale of mineral lands, together with enactments for the better, more permanent and successful prosecution of mining. The attempt was made at the last session, but was defeated. Many will howl and complain; and yet we are of opinion that the advantages resulting from such a measure will prove of incalculable benefit to the Pacific States and the Federal Government. At present, some 80,000 miners in this State pay but a small tax, comparatively speaking. Should the Government undertake to dispose of the mineral as it does the tule and agricultural lands, an immense amount of revenue would be realized at once. The mining population would then remain permanently on their claims; gold fevers and excitements of that nature, would be far from swaying them from their homes; they would contrive to work their claims in a systematic way, with a view to permanency and economy. The mining claims in Nevada county are rich, and the owners thereof have no plausible reason for withholding their yields. If we desired, we could easily obtain the aggregate amounts realized by means which they could not evade; and as it is, we get the semi-annual amounts through the mint. But from which particular locality the several deposits come from, may for a time remain sealed to the public.

On the other hand, if the Government should conclude to hold the mineral lands, and instead thereof tax miners pro rata of what they extract from their respective claims, the results of the amounts extracted would become generally known at once, and the true richness of our golden land proclaimed. Commissioners and overseers appointed by Government would see to it that the daily or weekly results are marked down. Besides such enactments, stringent laws governing mining will accompany, having especial reference to the construction of tunnels, shafts, levels, &c., and accidents resulting from carelessness in these matters shall be severely punished, by fine or imprison-

ment. If we are not in favor of taxing miners, we are certainly in favor and would strongly advocate a systematic mode for prosecuting mining in this State. Other evils would in turn be reached by means of such enactments.

## OUR LATE REVERSES.

A humiliating spectacle for a proud and powerful people are the late reverses the Union armies have met with in the South. They are enough to make a loyal man's cheek color with shame, and droop his head in sorrow. An army of rebels, in the main not much more than half our numbers, and not near as well appointed, have not only driven us from the territory they claim as theirs, but have advanced into the loyal States, and threaten our very Capital! Truly, it is "carrying the war into Africa." It is useless to try to hide or overlook the fact—we have met the enemy and—they have defeated us; and, to lighten our mortification, we have not even the poor consolation of an excuse to offer in palliation—we must quaff the bitter cup without anything to mollify its severity. We have had a year and a half to recruit and discipline our forces—time which, we were told, was being improved; we exultingly advanced to the very trenches of the rebels, and only waited for favorable weather to attack and capture them. But instead of attacking we were attacked, and instead of capturing we came nigh being captured, and were compelled to make an inglorious retreat. That those at the helm of state are responsible for these disasters, no one conversant with the history of the past year will deny. The loyal States, with unparalleled promptness and enthusiasm, responded to all the calls Government made upon them: they furnished money by millions and provided and equipped an army such as, in point of numbers and personnel, has not been equalled by any one nation since the great Napoleon's invasion of Russia. And after all this outlay of life and treasure, to be beaten by an army confessedly inferior in point of numbers, who are laboring under the conviction that they are fighting against the regularly constituted authorities—shows that there is culpable imbecility or gross mismanagement in the Administration.

Our soldiers are as good stuff and as brave men as tread the earth, composed as they are of the acknowledged bravest peoples in the world—Americans, Irish, Germans, &c.—and carry with them the moral force of knowing that they are in the cause of right and order. But they have been given for officers men whose peculiar acquirements and experience in no manner fitted them for military leaders; men who know not enough of military science to manoeuvre a regiment on parade, let alone lead an army into battle. And this was done not for lack of tried and able officers, (for many such we have,) but through execrable favoritism. 'Tis true there are many honorable exceptions; but these latter were so shackled and their powers so limited, that they were unable to accomplish anything.

Our late misfortunes, however, have, we hope, awakened those at the head of the nation to a sense of their folly; and, if they wish the loyal masses to still retain a hope of seeing the authority of the Government established over the seceded States, they will bury personal jealousies, and reconstitute the army in such a manner as will be likely to win the gratitude of our own and the respect of foreign nations. In a word, put soldiers at its head, and send home the politicians to attend their caucuses. And for the honor of the country, let us have done with this wrangling and indecision: do not be perpetually changing, removing and appointing—tearing down to-day what was built yesterday; for nations, like armies, are almost certain to become disaffected when the rulers show their incapacity to govern.

If these be done, instead of rebel hordes desecrating the loyal soil of Pennsylvania, in less than twelve months that sacred emblem of liberty, the beacon of the oppressed, the hope of the suffering patriot—the glorious Stars and Stripes, will not only float over Richmond, but over every fort and citadel in the South.

SAN FRANCISCO, Sept. 13.

MILITARY ELECTION.—On Saturday evening last, the Franklin Light Infantry elected D. M. Greene First Lieutenant, *vice* Stuart, resigned; and John T. Barry senior Second Lieutenant, *vice* Greene, promoted.

## OUR INDIAN TROUBLES.

From various parts of the mining regions of the State accounts are daily coming to us of the hostile attitude of the natives. Such a condition of things exercises a very injurious influence on the productive industry of the country. Surely the difficulties, toils and hardships with which our mining population have to contend are sufficiently onerous, without adding thereto these continual apprehensions of the tomahawk and scalping-knife of the savage.

What are our numerous soldiery about, that some of them are not made to operate in this direction? We have now lying idle, in different parts of the State, some five or six thousand military characters, who, so far as we can learn, have never yet—though they have been mustered into the service over a year and living upon Uncle Sam's "pap" all the time—been called upon to perform the slightest active duty. A little exercise, we have no doubt, would not only be beneficial but very grateful to them; and certainly such exertion could not be directed to a more useful or humane purpose than that of terminating these Indian difficulties.

This has to be done either by the General Government or by the State and private enterprise. If accomplished by the former, they thereby save all the expense which will be attendant on fitting out an expedition by the State. This State has already large claims against the National Government for expenditures incurred in suppressing Indian hostilities; and it is certainly not desirable that these claims should be increased. It is well known that the General Government is responsible for all the expenses necessarily incurred for purposes of this kind, as it has on various occasions heretofore recognized. Why, then, when it has the men already under pay, and lying in idleness, could not the Government employ them in this way, temporarily, and thus save the expense of having these hostilities suppressed by the State. They could thus be more promptly as well as more effectually put down; whilst, at the same time, such a course would at once withdraw from those unprincipled whites, who are said purposely to excite these wars, all temptation and inducement to prosecute their unholy schemes; for if these hostilities are thus designedly excited by bad men of our own race, it is only with an eye to some future charges for military services, that they may "feather their own nest" at the expense of the public treasury.

The Government could scarcely offer a more direct reward for getting up these Indian wars than by leaving them to be dealt with by the very men who produce them, and then paying the expenses out of the general treasury. If, however, instead of allowing them to be put down by private or State enterprise, the Government would, whenever they occur, send their own troops to suppress them, and call the guilty perpetrators of the first wrong to stern account, it would be rendered impracticable to make them a matter of speculation by private adventurers. The United States troops now in California are doing nothing, and where is the excuse for thus allowing our most productive citizens to be driven from their homes and avocations by these Indian outbreaks? why not reduce them at once to subjection and place them on the reservations for civilization?

The present is too critical a juncture in our financial affairs, to permit the gold-bearing regions of California to be rendered thus useless and unproductive. It is almost alone upon the basis of the gold and silver mines of this coast that our present exorbitantly expanded paper currency must find a support—and every contraction of the field or diminution of the amount of their production, most sensibly affects the wide circumference of the country. It is gold and silver alone that supplies the solid circulating medium of a country, and hence the Government is loudly invoked to see to it that the free and unembarrassed working of the mines of these precious metals is not interfered with in the slightest degree. We, therefore, call upon the military authorities of this coast to put down at once and forever these eternal and ever periodically returning Indian hostilities, and allow our hardy and industrious miners to pursue their vocations, at present so indispensable to the vitality of trade the prosperity of commerce and the general well being of the nation. They may thus render as great, or greater, service to the country than if they should meet and conquer the bannered foe upon the plains of civil war.

Will not the military commandant on this coast act on this suggestion, and thus save the national treasury at least two or three hundred thousand dollars? Don't say you have not got the power; take the responsibility.



## A CHAPTER ON INVENTORS AND DISCOVERERS.

The whole community is benefitted by the promotion of the useful arts, and, therefore, it is for the public good to hold out the promise of rewards to the inventors of new and useful arts and manufactures, who may first put the public in possession of them. It is true that by such a grant as a patent makes—a monopoly for a time—every other person is restrained during the continuance of the monopoly from using the invention, even if he makes a similar discovery himself. But at the time the grant is made, it is by no means certain that the invention will be given to the public, or even made by any other person; and by the temporary suspension of their right, the people acquire the certainty of being able to use the invention at the expiration of the monopoly. Utility to the public is, in fact, the consideration of every grant for the sole use of an invention, and letters-patent containing such grants always state the public good to be the motive in making the grant.

Hence, therefore, the total absence of utility to the public, in any invention, will at all times vitiate a grant of the sole use of it. But it will not be void on that ground if it were useful to the public, although such utility may be very small.

But an invention may be of some use to the public, and yet be so trifling or frivolous, that the inconvenience arising from a grant of the sole use of it would not be adequately compensated by the benefit which the public would receive from it. The law, therefore, has deemed it right that mere discovery of any new manufacture shall not vest the sole right to use it in the inventor; but that to be entitled to such privilege he must obtain a grant from the Government, who have the right of judging, not only whether the invention is likely to be of sufficient utility to warrant its being made a matter of public concern, but also the duration of the privilege it merits.

There is reason to believe, though it is not positively known, that the practice of making grants of the sole use of inventions originated in England, and that it has thence been copied more or less closely by other nations. It is a power derived from the common law of England; and this law has been modified by statute in modern times both in England and other countries. (Hindmarch on Patents, 3.)

No person can be the grantee of a privilege in an invention except the *true* and *first* inventor. To be capable of supporting such a grant the patentee must be the person who has not only actually invented or imported the invention, but who has been the first to give it to the public.

In England it is held that the first importer of an invention from abroad may have a patent. (Edgeberry vs. Stephen, 2 Salk., 447; Dav. P. C. 36.) This, however, is not the case in the United States. Here the inventor alone can get a patent. He is deemed the first inventor who first gives, or contracts by patent to give, a knowledge of it to the public. And the fact of first introducing an invention is *prima facie* proof of first invention. Although a patentee's claim to be the first inventor will not be defeated by the prior discovery of the same thing by one who kept it secret, yet it is otherwise if the invention was known to be used by the public at any time before the date of the patent.

If the inventor himself publishes a knowledge of it, the law deems that he thereby dedicates it to the public; and when once the publication has

been made the act is irrevocable, and a patent cannot be granted, or if granted will be useless. And if the public becomes possessed of a knowledge of it by any means whatever, no patent can be granted.

## BAD MANAGEMENT IN MINING.

Our recent tour towards the Sierra Nevada has afforded us an opportunity of seeing considerable mining enterprises, which from their simplicity and primitive modes, hardly entitles them to be called enterprises. The placer mines throughout California, it must be assumed, have scarcely begun to be worked, although something like \$600,000,000 have been extracted since the year 1848, and countless millions are yet concealed in the hill sides and mountains on both sides of the Sierras. Thus far only a scraping in the ravines and gulches has been the extent of mining, and when these had been worked once or twice (some of which would even now pay from \$3 to \$10 per day to the hand), are declared "worked out"—despite after the periodical rainy seasons, when the same will, as before, pay excellent wages, which proves that the hillsides are yet pregnant with fine particles of gold. In our tour from Folsom to Placerville, we noticed many places abandoned on account of the want of water, and little, if any, work was being done to prepare for the coming rainy season. We noticed but one ditch company, but their rates are held so high as to preclude many from mining, unless their claims are extraordinarily rich.

The old mode of sluices and toms are still in vogue in this district. The current in the sluices is generally so great as to carry with it the fine atoms or scales in its course; only the heavier particles or grains of metal precipitate. The miners in and about El Dorado county seem not to have taken advantage of "Dunning's under-current sluice," as described in the MINERS' COMPANION AND GUIDE. If recourse were had to this invention, together with increasing the width of the sluices and drifting the hillsides in every direction, from 15 to 20 per cent. more gold would be saved.

Though quartz veins abound in the vicinity of Placerville, yet little enterprise is being evinced to work them for their metallic wealth. One establishment only seems to be profitably engaged in reducing a moderately good paying lead, which renders on an average \$15 per ton in gold. It is owned by parties formerly of Nevada county, and is known as the Pacific Quartz Mill. Some fifteen members form this company, many of whom are practical miners, having worked in the Lake Superior copper mines. The reducing works are of an improved plan, being a 20-stamp Bryan's mill, 30-horse power engine, and utensils for working sulphurets.

A large field is still open in Placer and El Dorado counties for mining, and we see no reason why the complaining white man in these sections should allow the miserable Mongolian to quietly go to work and extract the precious metals from under his nose. The coolie, with his simple means, takes out enough to pay an enormous tax, besides enriching himself in a few years, even after the claims have been worked several times over. It is equally astonishing to see that the municipalities, town corporations, or enterprising citizens in mountain towns, do not take advantage of making the coolies subservient to their interests; namely: these coolies are under the immediate surveillance and superintendence of companies in San Francisco, who have established agencies all over California, espe-

cially where mining is carried on, and the results of their labor and industry, with but few exceptions, go towards enriching those opulent mandarines. Now, every corporation or private company throughout California, might take up and prospect mining ground by hiring from mandarin companies their nominal slaves or coolies, who may be had in numbers at from \$15 to \$20 per month *per capita*. Sooner or later the laws regulating the Chinese tax must and will be so modified as to preclude them from our mines, except when employed by white persons or companies. Aside from mining pursuits, their services might be profitably employed in the construction of ditches, canals and roads—these latter, by the way, are wofully neglected. The present rates of wages are too high, ranging from \$2 50 to \$3 per day, and scarce even at this.

Altogether, the districts which we visited show lack of enterprise and judgment. The roads, with few exceptions, are, for this season of the year, in sad plight, and if we had authority over the road overseers, we should condemn them to be hung for neglect of duty.

## URGENT NECESSITY.

The impending session of the Legislature will have to pass a law and provide funds for the establishment of a State school, in which the several sciences belonging to geology, mineralogy, chemistry, metallurgy and mining engineering will be taught by able professors. The expenses necessary for such purpose can easily be defrayed by imposing a small tax upon the 80,000 miners now employed in our mines, and these will willingly further the ends for such an institution. The want of such a school has long been felt, for many reasons, and we have hundreds of young men who would willingly pay for their tuition in these branches. Aside from the benefits which the poorer class of students would receive, and who are either physically or mentally incapable for other occupations, when graduated students, have left the institute, they can be useful to themselves and the community at large, and their services in developing our mineral riches will more than compensate for the outlays of the State. The majority of our miners are devoid of the necessary knowledge in mining for the precious metals, and the greater part of them only know how to traffic in "paper stock." The State cabinet of minerals should at once be placed at the disposition of the school, and analyses of all the specimens should be made. The several scientific associations will, we are satisfied, render every aid to such a school. We are little known abroad for our mineral wealth, because we do nothing for the permanent and systematic prosecution of mining operations. Gentlemen Legislators, your predecessors have been noted for squandering the hard-earned monies of your constituents; do you abrogate this pernicious practice, and give us a first class mining school, with a salaried professor for each branch, thereby you will merit the blessings and thanks of a grateful people, who are now groping in darkness while in search for the needy.

ON DIT.—It is rumored about town that a new scientific and mining journal is to appear. If the parties were only aware of the up-hill work attendant on the building up of such a journal, unless they have about \$20,000 to invest without the shadow of return, they would keep their fingers out of the pan. The MINING AND SCIENTIFIC PRESS is too well established and sufficiently ample in furnishing the mining community with instructive reading matter. We have not made any money yet, and we cannot see how a new comer can supersede us in this particular.



# WHY WILL YOU SUFFER, YOU THAT ARE AFFLICTED?

DISEASES CURED WITHOUT THE USE OF MEDICINES!

THE DIRECTORS OF

The Electropathic Institute,  
645 Washington street,

Offer those who would avail themselves of the researches into the arena of medical science, an opportunity to benefit thereby. Thus, by the application of an art totally differing from the usual routine systems of the day, Electropathy is now the favorite study and practice of the most learned medical savans throughout continental Europe. Every proof exists that the magnetic electro current reaches directly the nervous centres, the brain, spinal cord and nerves of sensibility and motion, the controlling agents of organic life. The application of this powerful and mysterious agent is thus made, under the guiding hand of experience, subservient to the alleviation of disease, restoring through the medium of the nervous system the normal functions of the various viscera. By this agent the pernicious consequences of converting that most delicate of organic tissues, the stomach, into a chemical laboratory or drug shop, is totally avoided. Thousands can testify as to its efficacy, and many have experienced its beneficial effects. When correctly administered, Electropathy is applicable to all diseases to which flesh is heir, but more particularly to complaints of the nervous system, Rheumatism, diseases of the Lungs and Spine.

The Directors have secured the services of Dr. JOSSELYN, whose improved Electropathic Instrument stands in advance of all others as a curative agent. This scientific Physician will be in attendance from 9 A. M. until 8 P. M., to consult with the afflicted, and in all cases where he can conscientiously do so he will warrant a perfect and permanent cure. Those particularly who have exhausted the catalogue of medicines, will do well to call and consult him, and examine the certificates of cure which he has recorded in the Institute.

## Rheumatism! Rheumatism!

The above troublesome disease can be cured by electricity only; and Dr. Joselyn of the Electropathic Institute will warrant a cure, perfect and permanent, in a very short time, or ask no pay for his services.

## Consumption,

That awful and hitherto considered incurable disease, can be cured by the Electro-Magnetic treatment. The Electropathic treatment at once stops the ravages of this fell destroyer, and the cure commences from the first treatment. A cure in all cases will be insured.

## Diseases of the Eye.

The Electric treatment is the only mode by which a rapid and permanent cure can be effected in Sore Eyes. It acts upon the nerves and mucous membrane connected with the eye, and the removal of morbid matter and all inflammation, produces a healthy action, at once restoring that valuable organ to its natural state. A cure warranted, or no pay asked.

## Electro-Magnetic Baths.

Connected with this system are the renowned Electro-Magnetic Baths. Here let us caution the public against the numerous impositions in the bathing line. The pure magnetic bath is one of the most effective aids in the removal of disease from the system, but if given at the wrong time is likely to aggravate trouble; and cases have been known where the patient has been injured so badly as to require months to remove the injury. The only place where these baths can be obtained in all their purity is at the Institute, where the resident physician will be always ready to examine and see that they are not unseasonably administered, and if not necessary, advise the requisite remedy.

Below will be found a list of the cases which have been successfully treated by the Electropathic System, at the Institute, during the last year:

NAME OF DISEASE.	NUMBER.
Rheumatism, - - - - -	821
Neuralgia, - - - - -	363
Dyspepsia, - - - - -	297
General and sexual debility, - - - - -	240
Asthma, - - - - -	220
Bronchial affections, - - - - -	187
Fever and Ague, - - - - -	183
Female irregularities, - - - - -	161
Mercurial affections, - - - - -	130
Diseases of the eye, - - - - -	485
Paralysis, - - - - -	78
Serofula (long standing), - - - - -	330
Catarrh of the lungs, - - - - -	27
Catarrh of the head, - - - - -	321
Liver complaints, - - - - -	420
Deafness, - - - - -	18
Panama fever, - - - - -	10
Consumption, - - - - -	17
Private diseases, - - - - -	1123

## Females

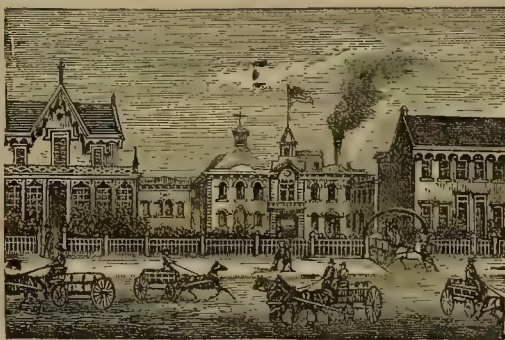
In need of a physician should bear in mind that here is a remedy that will positively cure all diseases incident to the female economy, without the inconvenience of taking bitter medicines. Here all can be relieved of their troubles and irregularities. Institute open at all hours. Examinations gratis. au14-3m

## GREAT REDUCTION IN PRICES.

STANFORD BROTHERS,  
121, 123 and 125 California Street,  
KEEP THE LARGEST STOCK OF ALL KINDS OF  
Lamp Stock,  
And will Sell Cheaper than any House in this State.

LAMPS,  
CHIMNEYS,  
WICKS,  
CAMPHENE,  
BURNING FLUID,  
ALCOHOL,  
TURPENTINE,  
COAL OIL,  
KEROSENE OIL,  
COMET ILLUMINATING OIL.  
SPERM OIL,  
LARD OIL,  
MACHINERY OIL,  
RAPE SEED OIL,  
CHINA NUT OIL,  
LINSEED OIL, Raw and Boiled,  
POLAR OIL,  
SHARK'S OIL,  
NEATSFOOT OIL,  
TANNER'S OIL,  
&c., &c., &c.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.



PHILADELPHIA BREWERY,  
Second street, corner of Folsom, SAN FRANCISCO, CAL.  
Hoelscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to express at the same moment, our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom—where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom. Nov9.

## SQUARZA'S PUNCH.

### HOME MANUFACTORY.

WHOLESALE AND RETAIL,  
No. 44 Leidesdorff street, near Sacramento st.  
Branch at 406 Montgomery street. my30

## FULTON FOUNDRY AND IRON WORKS.

HINCKLEY & CO.,  
MANUFACTURERS OF STEAM ENGINES,  
Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings,  
Mining Pumps, and all kinds of Machinery,  
Amalgamators, Etc., Etc.  
47 & 49 First Street,  
BET. MARKET AND MISSION, SAN FRANCISCO

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to iron when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.  
D. B. HINCKLEY WM. E. WORTH WM. A. FIELD

## REMOVAL.

OFFICE OF THE PACIFIC METALLURGICAL WORKS  
is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.  
Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in cash, for shipments.  
S. C. BRADSHAW, Agent,  
my30 318 California street, near Sansome, up stairs.

A. S. ROSENBAUM & CO.—Importers of pure Havana Cigars, Tobacco, etc., corner Clay and Battery, 25 and 27 Cedar street, New York.

## J. D. DEMAREST, M. D.,

Graduate of N. Y. University,  
1848.

Professor of the theory and practice of Medicine, as demonstrated in the treatment and Cure of Special Diseases in this State, during the last thirteen years.

IN ALL THE BRANCHES OF BOTH THE ARTS AND SCIENCES, AS WELL as the Medical Profession, speciality has ever been recognized by men of judicious reflection, as both progressive and instructive, for it is a perfectly well demonstrated fact that any individual, however astute he may be, attains to an infinite greater degree of perfection by a thorough and persevering continuity to one branch of art, science, medicine, or mechanics, than if he attempted to accomplish half a dozen—as in the latter case he would be likely, nine times out of ten, to obtain at most but a very superficial knowledge of either. In the practice of medicine or surgery, it unravels, simplifies and makes clear to the arduous student the mysterious complications (complicated on account of the numerous causes which produce them) which diseases of any kind take upon the human system; operating as they do frequently both on the mental and physical organs. It seeks to recuperate and restore the functions to their natural and proper status, as well as to neutralize all antagonistic influences to which the system is continually subject. Certain it is, that while the busy affairs of life seem to exhaust all our time and attention, the incipency and progress of disease, sometimes of dangerous and fatal character, approach us almost unnoticed. Slow in its progress, but insidious in its course, a disease, or even the simplest disturbance of a single function, frequently becomes an affair of imminent danger when least expected. To this the attention of the physician of specialities is always earliest given. With proper perceptive powers, added to ample experience, he is necessarily able to arrive with unerring certainty to a correct conclusion as to the character of the ailment and the proper appliances for its cure. This I have never found to fail. A remedy properly administered, and at the proper time, is sure to effect the object of its mission, provided it be directed by the hands of a skillful physician, who knows his business. I need not reiterate the old adage, that "Health is the endorsement of Divinity," sent to us for our own benefit, and that we should not for a moment disregard the secret admonitions that tell us to beware, lest we fall imperceptibly into a labyrinth from which it will be much more difficult to escape than if we had given proper attention to ourselves before venturing so far. Consult your physician before it is too late; confide in him, and you will save yourself an infinity of suffering.

Below will be found a few of the testimonials received by Dr. Demarest previously to his leaving home for this country in 1849:

NEW YORK, Jan. 14, 1848.

This may certify that Dr. J. D. Demarest, by the assiduity and attention which he has given to his studies, and his uniformly good conduct, justifies me in believing that those among whom he may be placed, can repose confidence in his professional attentions.

VALENTINE MOTT, Prof. Surgery N. Y. University.

I concur in the favorable impressions of my colleague.

SAMUEL HENRY DICKSON, Prof. Theory and Practice of Medicine, N. Y. University.

MARTIN PAINE, Prof. Materia Medica, N. Y. University.

This may certify that Dr. J. D. Demarest, has been in my office for some time past, and has attended a number of my patients for me, with perfect satisfaction both to them and myself. I, therefore, take pleasure in recommending him to any person or persons requiring medical services. I can also speak highly of his moral as well as professional character.

NEW YORK, December 5, 1848.

J. WELDON FELL, M.D.

I take great pleasure in recommending to the notice of all "whom it may concern," Dr. Demarest, a gentleman of first rate attainments in his profession; and a man in every way qualified to be trusted with the health and lives of any body of men he may choose to join. I have had his acquaintance a long time, and he has attended my patients for me with entire satisfaction.

NEW YORK, January 29, 1848.

N. CLARK LEAVINGS, M. D.

Being desirous, above all things, of rendering myself proficient in my profession, I assure my patients and the public that I attend personally to all cases that come before me, either by correspondence or by personal visits. The strictest confidence and the utmost regard for professional honor and secrecy always observed.

Patients residing in any part of this State can have the remedies applicable to their several disorders forwarded to them, without risk of exposure. Be minute in the details of your case, as regards the duration of the complaint, symptoms, age, general habits of living and occupation.

All female complaints, of whatever name or nature, treated successfully. Those ladies whose complaints naturally excite a hesitation in applying for advice, may rest assured that in most instances a personal interview is unnecessary, as remedies and general instructions can be administered through correspondence. Address, DR. J. D. DEMAREST, San Francisco, Cal.

Office—S. E. corner of Washington and Sansome streets, over Ulman's Book Store, nearly opposite the Post Office. j627

AGENCY FOR PATENTS.—The undersigned having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Patents and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,

Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD. LOANS NEGOTIATED

FREDERICK KESMODEL,

Cutler and Surgical Instrument Maker

317 KEARNY STREET.

Between Jackson and Washington streets,

SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are all uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourself.

FREDERICK KESMODEL, Inventor and Patentee.

ap3 tf



# PACIFIC PATENT AGENCY

## JULIUS SILVERSMITH SOLICITOR.

Office.....State Capitol,  
Nos. 23 and 24, Up-Stairs,  
Corner of BATTERY and WASHINGTON STS.  
SAN FRANCISCO, CAL.

### PATENT LAW AMENDMENT OF 1861.

#### How to Obtain Patents Under the New Law.

The Patent Law Amendment Act, passed March 4th, 1861, and now in force, introduces several important changes in our Patent System. The general practice of the Patent Office, however, in regard to the examination and issue of Letters Patent for new inventions, remains nearly the same as heretofore.

The first question, therefore, that presents itself to the inventor, who desires to procure a patent, is: "Can I obtain a patent?" A positive answer to this question is only to be had by presenting a formal application for patent to the Government, embracing a petition, specification, model, duplicate, drawings, and the payment of the prescribed official fees. Aside from these steps, all the inventor can do is, to submit his plans to persons experienced in the business of obtaining patents, and solicit their opinion and advice. If the parties consulted are honorable men, the inventor may safely confide his ideas to them, and they will inform him whether or not his invention is probably patentable.

Those who have made inventions and desire to consult with us respecting the same, are cordially invited to do so. We shall be happy to see them in person at our office, or to advise them by mail, or through the MINING AND SCIENTIFIC PRESS. In all cases they may expect from us an honest opinion. For these consultations, opinion and advice, we make no charge. A pen and ink sketch, and description of the invention should be sent, together with a stamp for return postage. Write plain; do not use pencil or pale ink; be brief.

Remember that all business committed to our care, and all consultations, are kept by us secret, and strictly confidential.

#### PRELIMINARY EXAMINATIONS.

In some cases it may be advisable as a measure of prudence to order a preliminary examination. This consists of a special search, made at the U. S. Patent Office, Washington, through the medium of our associate in that city, to ascertain whether among all the patents and models there stored, any invention can be found which is similar in character to that of the applicant. On the completion of this special search we send a written report to the party concerned, with suitable advice. Our charge for this service, including the report, is ten dollars. This search, though it involves the expense just named, will usually prove satisfactory. If the same device has been before patented, the time and expense of constructing models, preparing documents, etc., will in most cases be saved; if the invention has been in part patented, the applicant will be enabled to modify his claims and expectations accordingly. Many other obvious advantages attend the Preliminary Examination; although the strictest search does not always enable the applicant to know positively whether a patent can be had. Applications for patents are often rejected because the Examining officer finds a description of the alleged invention in some foreign publication; or some other person has been previously rejected on an analogous device; or some other invention for a similar purpose, but partially resembles the applicant's in its construction; or the Government makes an unjust or uncommon decision. Against none of these contingencies does the Preliminary Examination provide; it will, however, generally inform the applicant whether an improvement similar to his, and used for the same purpose has ever been patented or not in this country.

Parties desiring the Preliminary Examination are requested to remit the fee (\$10), and furnish us with a sketch and description of the invention.

#### CAVEATS.

A Caveat is a confidential communication made to the Patent Office, and is therefore filed within its secret archives. The privilege secured under a caveat is, that it entitles the caveator to receive notice, for a period of one year, of any application for a patent subsequently filed, and which is adjudged to be novel, and is likely to interfere with the invention described in the caveat, and the caveator is then required

to complete his application for a patent within three months from the date of said notice. Caveat papers should be very carefully prepared. Our fee for this service varies from fifteen to twenty dollars. The Government fee under the new law is reduced to ten dollars; and this sum does not apply, as heretofore, as part of the fee on presenting an application for a patent.

Inventors will oftentimes find it very important to take advantage of the caveat system—the expense under the law being comparatively small.

To enable us to prepare caveat paper, we only require a sketch and description of the invention; no model being necessary.

#### EXPENSE OF APPLYING FOR A PATENT, REJECTIONS, ETC.

Under the new law, the Government fee, on filing an application for a patent, is fifteen dollars; and if the patent is allowed, twenty dollars additional is required. If rejected, the first fee of fifteen dollars is all that is demanded. English, French, Austrian, Prussian, Spanish, and inventors of every nationality, may now obtain patents in the United States upon the same terms as our own citizens. The only discrimination made is against subjects of governments that discriminate against the inhabitants of the United States.

To the foregoing official fees must be added the Attorney's fees for preparing the various documents and drawings. Our charge for preparing a case, presenting it to the Government, and attending to all business connected with it, until a decision is given, is generally forty dollars; but the charge is higher if unusual labor is involved. If the patent is granted no further agency expenses ensue. If the application is rejected we cause a thorough investigation to be made into the reasons presented by the Commissioner for refusing the patent. In making this examination, we have access to all the drawings, models, books and specifications cited in reference, and we report the result as early as possible to our client. For this service we make no charge. If the rejection proves to be an unjust one—which sometimes happens—it can generally be reversed, and the patent obtained by contesting the case. For this prosecution we charge a fee proportionate to the extra labor involved, payable only on the issue of the patent; but our demand will be reasonable and satisfactory to our clients, and will be arranged beforehand by special agreement.

GENERAL REMARKS.—For the information of applicants, we would state that some agents are in the habit of charging for the preparation of the case, and having no further facilities, decline all investigation or prosecution when rejected. Others, also, having no facilities of their own, advise their clients to go to the expense of procuring official copies of the drawings and specifications of all the references. Again others are in the habit of charging a high price at the outset, in which they include the cost of prosecuting the case, if by them deemed necessary. Under this system, if the patent issues, or is justly rejected, no further prosecution is needed; but the inventor has paid full price for a service not wanted and never rendered.

Our object in making the above statement is, not to reflect upon the manner in which other agents conduct their affairs, but simply to have our own method of doing business clearly understood.

The system adopted by us works well, gives general satisfaction, and presents to all applicants, rich or poor, an equal opportunity of having their patent cases prepared, conducted and prosecuted in the best manner, by experienced attorneys, upon the most moderate terms. Inventors who have rejected cases, prepared either by themselves, or for them by other agents, and desire to ascertain their prospects of success by further efforts, are invited to avail themselves of our unequalled facilities in securing favorable results. We have been successful in securing Letters Patent in hundreds of such cases. Our terms for such cases are very moderate.

#### MODELS, REMITTANCES, ETC.

The law requires that the inventor shall, in all cases, furnish a model, which must not exceed twelve inches in any of its dimensions; it should be neatly made, of hard wood or metal, or both, varnished or painted; the name of the inventor should be engraved or painted on it conspicuously.

Where the invention consists of an improvement on some known machine, a full working model of the whole will not be necessary. It should be sufficiently perfect, however, to show, with clearness, the nature and operation of the invention.

As soon as the model is ready, it should be carefully boxed and shipped by express or otherwise, to our address, namely, J. Silversmith, late State Capitol, Rooms 23 and 24, San Francisco. Prepay the expense, and send express receipt to us by mail.

Simultaneously with the model, the inventor should also send us the first installment of the Government fee, fifteen dollars. The money may be forwarded either by express with the model, or by mail. The safest way to remit is by draft on San Francisco payable to our order. Always send a letter with the model, and also with the remittance, stating the name and address of the sender. We sometimes receive envelopes containing money, but without any name or explanation; models are also frequently sent us from equally unknown sources.

A full description should also be sent with the model, em-

bodging all the ideas of the inventor respecting the improvement.

On the reception of model and Government fee, the case is duly registered upon our books, and the application proceeded with as fast as possible. When the documents are ready we send them to the inventor by mail, for his examination, signature, and affidavit, with a letter of instruction, etc. Our fee for preparing the case is then due, and will be called for. The case will then be presented to the Patent Office, and as soon as the patent is ordered to be issued, the applicant will be notified to remit the last installment of the Government fee, namely twenty dollars.

Inventors who do business with us will be notified of the state of their application in the Patent Office, when it is possible for us to do so. We do not require the personal attendance of the inventor, unless the invention is one of great complication; the business can as well be done by correspondence.

When the invention consists of a new article of manufacture, or a new composition, samples of the separate ingredients, sufficient to make the experiment, and also of the manufactured article itself, must be furnished.

The average time required to procure a patent, when the case is conducted at our agency, is three months. We frequently get them through in less time; but in other cases, owing to delay on the part of officials, the period is sometimes extended to four or five months, and even more. We make a special point to forward our cases as rapidly as possible.

#### RETURN OF MODELS.

Under the new law, if the applicant's case has been rejected he is entitled to withdraw his model from the Patent Office.

This law applies also to all past rejected cases, and if parties wish to obtain their models through us, they can do so at a small expense.

#### DESIGNS, TRADE-MARKS, LABELS, ETC.

Under the new law patents may be taken out for any new form of any article, also for tools, patterns, castings, machine-frames, stove-plates, borders, fringes, all new designs for printing, weaving, or stamping upon silks, calicoes, carpets, oil cloth, prints, paper-hangings, and other articles. Trade-marks, labels, envelopes, boxes and bottles for goods, may also be patented; likewise all works of art, including prints, paintings, busts, statues, bas-relief, or compositions in alto, or basso relievo, new dies, impressions, ornaments to be placed upon any article of manufacture, architectural work, etc. The terms for which these patents are granted varies according to the fee paid by the applicant, as follows:

Patent for 3½ years.....	\$10
"      7      "      .....	15
"      14     "      .....	30

No models are required. But duplicate drawings must be furnished, together with the usual specification, petition and affidavits, which, to render the patent of value, should be prepared with the utmost care.

Our facilities for the prompt preparation and securing of patents are of the most extensive character and our charges are very moderate.

#### INFRINGEMENTS.

The manufacture, sale, or use of a patented article, without consent of the owner of the patent, is an infringement, and subjects the infringer, by injunction from the Court, to an arrest or prohibition from the employment of his machinery, shop, works, factory, and men in production of the article.

In addition to injunction the infringer is liable to be mulcted in treble the amount of damages awarded by the jury. The maker, the workman, the seller, and the purchaser, if a user, are all liable, either collectively or individually.

Having access to all the patents, models, public records, drawings, and other documents pertaining to the Patent Office, we are prepared to make examinations and give opinions upon all infringement questions, advise as to the scope and ground covered by patents, and direct with vigor any legal proceedings therewith connected. Our charge will be moderate, and proportionate to the labor involved.

Address all letters of inquiry to J. Silversmith, State Capitol rooms 23 & 24, San Francisco.

#### APPEALS.

In rejected and other cases, the new law provides for an appeal from the Examiner-in-chief to the Commissioner in person, on the payment of a fee of twenty dollars. A further appeal may be taken from the decision of the Commissioner to the U. S. Court, of the district of Columbia. These appeals are heard by any of the Judges before whom the applicant elects to bring the case. No Jury. All the papers, models, etc., are sent by the Commissioner to the Judge, who then reviews the case, and either sustains or reverses the Commissioner's decision.

The party taking the appeal pays an additional fee of twenty-five dollars. The Judge appoints a day of hearing. The applicant can appear in person or by counsel to state his case and file a written argument. Five days are allowed the opponent to put in an answer, and a similar period to the appellant for a closing reply.

Many important cases are brought before the Judges on appeal, and the decisions of the Commissioner are not unfrequently reversed.

We have had successful experience in conducting these appeals and our services can be retained on moderate terms.



## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

A Circular containing further information, and a synopsis of the Patent Laws of various countries, will be furnished on application to J. Silversmith, Government House, San Francisco.

Miners, Inventors, Agriculturalists, Capitalist and Mechanics, will find it to their advantage to subscribe for the MINING AND SCIENTIFIC PRESS—being the only journal of that class published upon this continent. Issued every Saturday at four dollars per annum.

Address, J. SILVERSMITH,  
SAN FRANCISCO.

## RASCHE &amp; SONS,

131 Montgomery street., bet. Bush and Sutter,  
SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

## PIANOS, SHEET MUSIC

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;

T. GILBERT, Boston;

C. MEYER, Philadelphia.

Whose Pianos they have always on hand, for sale and to rent.

## PIANOS FOR RENT.

New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the trade and professors of music.

au14

**Important to the Afflicted.**—In consequence of the wide spread and devastating rule of empyrics throughout California, in the treatment of PRIVATE DISEASES, the Directors have concluded to place before the public the fact that the Resident Physician of the Electropathic Institute, 645 Washington street, between Montgomery and Kearny streets, is the best qualified physician in the State to ensure a PERFECT and PERMANENT CURE in such cases, and he will always be in attendance to consult privately with all who may require his services, and will ensure speedy relief. Should this meet the eye of any one who may have reason to fear that disease may be lurking in their system, they may call upon him without fear of being discovered; the charges will be moderate and the assistance prompt.

J. H. JOSSelyn, M.D.,  
Resident Physician.

[See advertisement in another column.]

## LEWIS COFFEY &amp; RISDON'S

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work or the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner of Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY,

J. N. RISDON

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company, at Aspinwall.

## FOR PANAMA,

The following Steamships will be dispatched in the month of August, 1862

Aug. 1st—UNCLE SAM, Captain R. H. Horner.

Aug. 11—GOLDEN AGE, F. R. Baby, Commander.

Aug. 21st—SONORA, ———— Commander.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York

For freight or passage, apply to

FORBES & BABCOCK, Agents,

je4 Corner of Sacramento and Leidesdorff sts.

GATTEL'S  
CAPILLACEUM,

...OR...

## Medicated HAIR TONIC

..FOR..

RESTORING, PRESERVING,

..AND..

## Beautifying the Hair.

It cleanses the pores of the skin, entirely frees the scalp from dandruff and all CUTANEOUS DISEASES, thereby preventing baldness and gray hair, and will cause the hardest hair to become soft and glossy.

Ladies will find the CAPILLACEUM a great addition to the toilet, both on account of its delicate and agreeable perfume, and the great facilities it affords in dressing the hair.

Price, 75 cents. For sale by all Druggists.

HOSTETTER, SMITH & DEAN,

au28 Agents.  
No. 227 Montgomery street, Russ Block.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, WHILE MR. BREWSTER was engaged in the Summer street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

## COMET ILLUMINATING OIL!

Manufactured expressly for Stanford Bros.

THIS POPULAR

## BRAND of KEROSENE

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

## Best Family Oil in the Market

STANFORD BROTHERS,

au14 Nos. 121, 123 and 125 California street.

## INTERNATIONAL HOTEL,

Jackson street, a few doors above Montgomery, San Francisco.

The Oldest Established First Class House in  
SAN FRANCISCO.

FIRE-PROOF BRICK BUILDING.

FOSTER & COLEMAN, Proprietors.

Most convenient to the Steamers' Landings, business streets,  
and places of Amusement.

Open all night.

## REDUCTION IN PRICES!

The nimble "Bit" is better than the slow "Quarter."

\$1 50, \$1 75 & \$2 per Day.

Fine Bathing Rooms attached to the Barber Shop. Warm and Cold Shower Baths free to guests.

NO DARK ROOMS! EVERY ROOM OPENS TO THE LIGHT AND AIR. Every room is furnished with a first quality Patent Spring Bed and Hair Mattress, and are superior to any other Hotel in the State.

The International offers to guests the greatest number and best furnished Family Rooms, and also sets the BEST TABLE of ANY HOUSE in the CITY.

No runners employed at this House. Our coachman will always be found on the boats, to take your checks and procure your baggage for our coaches. No charge for baggage.

We are determined that the International shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the State, and shall aim to merit a continuance of the popular favor we have enjoyed heretofore.

The following letter, which emphatically speaks for itself, was written by the Dean of the Faculty of the Philadelphia College of Medicine, to the editors of the Pacific Medical and Surgical Journal, for publication:

PHILADELPHIA, January 17, 1862.

To the Editors of the Pacific Medical Journal.—Gentlemen: My attention has been called to an article in the December number of your journal, in regard to the ad eundem degree granted by the Philadelphia College of Medicine to Dr. L. J. Czapka. When the application for the degree was made to the Faculty, it was accompanied by affidavits and testimonials to the effect that Dr. Czapka was a regular graduate M. D. of the University of Pesh, had served as a surgeon in the Hungarian army, and was a regular practitioner of medicine. On the strength of these the degree was granted. The ad eundem degree, as its name implies, is conferred on graduates only, and gives us new privileges. Had there been the slightest suspicion of irregularity, the application would have been refused. By inserting this in your journal you will do an act of justice to the College and confer a favor on Yours, very respectfully, H. RAND,  
Dean of the Faculty of the Phila. College of Medicine.

DR. L. J. CZAPKA'S Private Medical and Surgical Institute is on Sacramento street, below Montgomery, opposite the Pacific Mail Steamship Company's office, San Francisco. The Doctor offers free consultations and asks no remuneration unless he effects a cure. Office hours from 9 A. M. to 9 P. M.

**CERTIFICATE.**—I, the undersigned, Governor of Hungary, do testify hereby, that Dr. L. J. Czapka has served during the contest for Hungarian liberty, as Chief Surgeon, in the Hungarian army, with faithful perseverance. Whereof I have given to him this certificate, and recommend him to the sympathy, attention and protection of all those who are capable of appreciating patriotic self-sacrifice, and undeserved misfortune.

KOSUTH LAJOS, Governor of Hungary.  
Washington City, January 5th, 1862. jy26.



F. G. BEPLER,

## PRACTICAL COPPERSMITH,

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery,

SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work.

All orders from the country promptly attended to.

je6

## WRIGHT'S PICKS.

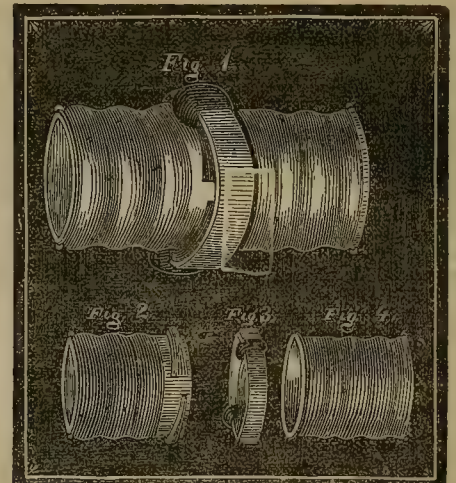
WRIGHT'S PICKS

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.

je20

## GARRATT'S PATENT COUPLING.



W. T. & J. GARRATT,

CITY

## BRASS &amp; BELL FOUNDERS,

Cor. First & Market sts., opp. Oriental Hotel,  
SAN FRANCISCO.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE AND LIFT PUMPS, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other pump parts, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."

TANDLER & CO.—Importers and Jobbers of Foreign and Domestic Wines and Liquors, 317 and 319 Front cor. Commercial.

F. G. BEPLER, Practical Coppersmith, No. 22 Bush street, Between Sansome and Battery.

ap16

my30



**DR. HILL'S IMPROVED AMALGAMATOR AND GLEANER.**

The accompanying illustration presents, Dr. Hill's improved gleaner, for which he obtained letters patent January 1st, 1861, since which, several of these have been practically employed in several southern counties, in this State and Nevada Territory. We have in our office a working model, which we have carefully examined and tested, and from careful observations concluded that it embodies all the natural principles and laws for doing that for which it is intended. Centrifugal and centripetal forces, form some of its leading and most interesting features: for its practicability and usefulness, we cheerfully refer to the certificates hereby appended emanating as they do from honorable and reliable sources. Our illustration is a faithful sketch; the simplicity of construction, and the manner of its operation, render it one of the most practical, useful and highly scientific inventions in existence. The inventor says:

1st, That it is automatic in its workings, consequently more economical than a vessel requiring manual aid; as with it and a mill of 12 stamps to crush and amalgamate, together with the services of an efficient feeder, twelve tons may be put through in as many hours; with a saving of 99 per cent. of the liberated gold; and the same be cleaned up in one hour from the stoppage of the mill by one man, whether for a day's, week's or month's run.

1. It is a perfect guardian against all such losses as result from overfeeding, over or under dosing a battery with mercury: all of which are well known by practical millers to be productive of much waste.

3d, It supercedes the necessity of copper plates whether inside or outside of the battery together with sluices, gunny bags, blankets, revolving barrels, and all their kindred contrivances, together with the incidental expenses attendant upon the same. It also dispenses with the toil of unhousing a battery, except in case of accident, or when gold is too coarse to pass the screens. So that the work requiring the services of three or four persons all day, is accomplished by one man in one hour, that being the extent of time required to clean it, whether, as observed before, for a day's, week's, or month's run.

4th, It can be so arranged that no one, save those having the exclusive right, can interfere with it; a desideratum not to be dispensed by mill proprietors.

The physical laws by which these results are arrived at are the following: specific gravity, centrifugal and centripetal forces, aided by water.

The specific gravity of gold is 19; mercury 13; quartz 2, about. Now it must be borne in mind that all bodies when immersed in water lose a portion of their weight equal to their bulk of water, consequently the relative weights of the above bodies will be as follows, gold 18; mercury 12; quartz 1 about, showing a great preponderance in the weights of gold and mercury, over that of quartz when in suspension.

When the crushed material from the mill arrives at the gleaner, an immediate separation of the amalgam from the accompanying waste matter takes place; the former from its superiority of weight descending to the pool of mercury, becomes incorporated with the same, and sinking to the bottom, remains as in a stationary vessel; while the waste matter or tailings, from their inferiority of weights, are held in suspension, and in this condition expelled from the gleaner by the centrifugal force.

Should any of the amalgam in its descent escape the pool, it is at once seized by the mercury-lized surface of the vessel, when, from affinity and cohesion, it so firmly fixes itself as to be proof against any power at work in the vessel to remove it.

The speed imparted to the gleaner is barely sufficient to expel the waste matter, and retain the good.

ANGELS, April 19, 1862.  
Having thoroughly tested the merits of J. M. Hill's gleaner, at the Broderick Mill, I unhesitatingly acknowledge its superiority over all other contrivances of my knowing, for the collection of amalgam; as also for its economy in working. In proof of which I would state that after running it one week, in connection with the Mill, I had the hides which were placed below it and which were repeatedly washed every day in a tank, carefully panned out by an experienced hand. The result of which did not exceed fifty cents; although milling at the time rock worth fifty dollars per ton.

SAN FRANCISCO, April 23, 1862.  
Dr. J. M. Hill, Angels Camp.—Dear Sir: I take much pleasure in testifying to the value of the gleaner as an amalgamator. I consider it superior to any other machine now in use for saving gold, no matter to what state of division the same may be reduced.

Yours,  
EDWARD A. BREED.

ANGELS, April 18, 1862.  
Having subjected Dr. J. M. Hill's gleaner to a fair trial, at my mill. I can safely say, that it is superior to anything in use, of which I have the knowledge, for the purpose intended, namely, the separation, and retention of amalgam, from crushed ores.

E. C. WINTER.

NEW ADVERTISEMENTS.

RE-OPENING OF

**THE NICARAGUA ROUTE!**

**People's Line,**

**CONNECTING CALIFORNIA and NEW YORK.**

**700 Miles shorter than any other route!!**

**EXPECTED TO MAKE THE TRIP THROUGH WITHIN 21 DAYS.**

The fast and favorite *Double Engine Steamship*

**MOSES TAYLOR, 1,500 tons,**

**E. HOWES ..... Commander.**

Will be dispatched for

**SAN JUAN DEL SUR,**

From Mission street Wharf,

Punctually at 9 o'clock A. M., of

**TUESDAY, ..... OCTOBER 21st.**

Connecting with the splendid Steamship

**AMERICA,**

**2,000 Tons.....JEFF. MAURY, Commander.**

**THE PEOPLE'S LINE**

Has been established on this

**Shortest, safest and Healthiest Route,**

To meet the universal demand for an

**OPPOSITION,**

And every Californian should give it a preference for the public good, as well as his own private advantage, which will be secured by

**Reduced Fare, Good Accommodations, and Quick Trips.**

This line is intended to be a permanency, and is not put on for the purpose of being bought or driven off. Speed, safety and the utmost comfort of passengers are the main objects. To secure these no merchandise freight (other than specie) will be taken. The MOSES TAYLOR is built with Water-Tight Compartments, and is unequalled for safety as well as speed.

For information or passage apply to  
ROSS, DEMPSTER & CO., Agents,  
425 and 427 Battery street.

**MUSIC! MUSIC!! MUSIC!!!**

**A. KOKLER,**

IMPORTER OF EVERY DESCRIPTION OF

**Musical Instruments and Musical Merchandise.**

**Sheet Music and Music Books.**

**GENUINE ROMAN STRINGS, &c., &c., &c.**

Light's New Patent Insulated Iron Frame is put into all of

**Light's & Bradbury's OVERSTRUNG PIANOS.**

Wherever these instruments are known they

**RANK AS THE FIRST AND BEST,**

In tone, delicacy of touch and durability.

*All the leading Musicians of the country have testified to their superiority.*

A. KOHLER, Agent for the Pacific Coast.

**Melodeons and Harmoniums,**

FROM THE CELEBRATED MANUFACTORY OF

**MASON & HAMLIN.**

*Warranted superior to all others.*

Send for a catalogue and Price list.

A. KOKLER, Agent.

**LABOR-SAVING & ROCK-DRILLING MACHINES**

TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRYMEN. The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

**HAND, HORSE, AND**

**STEAM-POWER MACHINES.**

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way.

A FOUR-HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process.

Address orders to  
W. M. W. DUNN,  
Fremont street, bet. Market and Mission, San Francisco.

**THE EYES! THE EYES!! THE EYES!!!**

**DR. E. H. PARDEE,**

*Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.*

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hacknied course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone;" "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonable.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.

MINING AND SCIENTIFIC PRESS.

**THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.**

**SECOND YEAR! VOLUME IV.—NEW SERIES!**

A new volume of this extensively circulated paper commenced March 3d 1861. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

*The Mining Interest!*

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

*The Inventor!*

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

*The Mechanic and Manufacturer!*

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

*To Chemists, Architects, Millwrights and Farmers!*

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

**Terms.**

To mail subscribers:—Four Dollars per annum.

**Club Rates.**

Five Copies for Six Months, \$5.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80

Names can be sent in at different times and from different Post-offices

Specimen copies will be sent gratis to any of the country.

**J. SILVERSMITH, Publisher,**

Room 24, (formerly) U. S. Court Building, Corner of Washington streets, San Francisco.



## Caveats and Patent Applications.

We are enabled, through our legal connection at Washington and European Patent Bureaus, to obtain Letters Patent for inventors and discoverers on this Coast, WITH LESS EXPENSE, and GREATER ECONOMY OF TIME, than any other firm in the United States.—Those requiring our services will please address us by stating the nature of their invention, with a sketch or drawing thereof, also a model if possible. The Government fees are as follows:

On every application for a design, for three years and six months, \$10; on every application for a design, for seven years, \$15; on application for a design, for fourteen years, \$30; on every caveat, \$10; on every application for a patent, \$15; on issuing each original patent, \$20; on filing a disclaimer, \$10; on every application for a reissue, \$30; on every additional patent granted on a reissue, \$30; on every application for an extension, \$50;

## MINING &amp; SCIENTIFIC PRESS AND PACIFIC PATENT AGENCY.



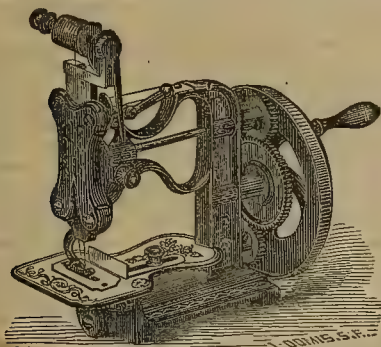
on the grant of every extension, \$50; on appeal to the commissioner from examiners in chief, \$20; on every appeal to the Judges of Circuit Court, D. C., \$25.

Address, JULIUS SILVERSMITH, Patent Solicitor, State Capitol Building, corner of Washington and Battery sts., San Francisco, Cal.

## Illustrations and Engravings.

WOOD ENGRAVING.—This office undertakes the preparation of Illustrated Catalogues and Circulars for Engineers, Agricultural Implement Makers, Hardware Dealers, Jewellers, Printers, Patentees, and other kinds of Wood Engraving; and, from considerable experience in illustrating mechanical journals, can insure accuracy of detail both in the Drawing and Engraving. This is secured by employing professed Mechanical Draftsmen in the preparation of the Wood Blocks. Drawings taken from Photographs.—Estimates furnished.

## SEWING MACHINES



AT PRICES WHICH BRING THEM WITHIN THE REACH OF ALL

THE...

## NEW ENGLAND SEWING MACHINES for \$25!

THIS MACHINE stands confessedly at the head of everything now before the public. In cheapness, neatness, compactness, durability and beauty, it has no rival. It is made with special reference to the wants of a family, and any one with the aid of the printed directions can learn to work it successfully in a few hours. It will work from leather to the finest cambric without the change of needle, tension, or feed. It gives the best satisfaction where it is sold, and all who use or examine pronounce it better adapted to meet the wants of every family than any other machine now offered to the public. Gauge and hemmer attached.

Every machine warranted, and kept in order free of charge. This is the only cheap machine that will do all kinds of family sewing.

STEWART & SHEAR, General Agents, No. 60 Second street.

sep11

WILLIAM FEIL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T.

WHITNEY & CO., Forwarding Merchants, corner of L and Front streets, Lincoln, Cal.

LATEST IMPROVEMENT  
In LADIES' BUCKLES.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address,

sep11

FREDERIK REICHEL,  
Manufacturing Jeweler,  
620 Merchant street, San Francisco.

V. SQUARZA'S  
PUNCH FACTORY.

WE PRESENT HERewith THE PORTRAIT AND TRADE MARK OF the gentleman who heads this article. Mr. Squarza is favorably known in this State for his Anti-Divorce Liquors and similar productions, as manufactured by him. We may mention that Mr. Squarza is an aid in the chemico-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,	Anisette,
Cognac do.	Whisky do.	Kirschwasser,
Arac do.	Kirschwasser do.	Brandy Cocktail,
Anti-Divorce Punch,	Cocoa do.	Anti-Dyspepsia Bitters,
Coffee do.		Appetiser,
Tea do.	Morning Comfort,	Ladies' Tears.
Pineapple do.	Kuennel.	

And CHAMPAGNES of all brands.

EBNER'S HOTEL, Sacramento, 18 and 20 K street, between Front and Second. Chas. & Frank Ebner, Proprietors.

BRAINARD HOUSE, Lincoln, Cal., on G street, between 4th and 5th.

JOHN R. SIMS, Manufacturer of Fire-Proof Doors and Shutters. Oregon Street, near Front.

## Washoe Stock Exchange,

N. E. cor. Montgomery and Merchant sts.,  
SAN FRANCISCO.

L. W. NEWELL & CO.,

Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.  
sep20

## Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS. OR manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.  
Address, J. SILVERSMITH, (Agent for Patentee.)  
sep1-3m San Francisco.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen

Stützen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an.

Die Expedition dieses Blattes.

C. CAPPLEMAN, N. W. corner Third and Harrison streets—Grocer,<sup>188</sup>  
Provisions and Liquors, my30

MAGNOLIA HOUSE, near steamboat landing, Stockton, Colf & Higginson  
proprietors, my30

HINKLEY & CO., Manufacturers of Steam Engines, Mills, and all kinds  
of Machinery, 47 and 49 First street, bet. Market and Mission, m23

R. E. RAIMOND—General Shipping and Commission Merchant, Dealer  
in Furs and Hides, Produce, &c., Front street, ap16

CLARK & PERKINS—Wool Commission Merchants, North East corner  
Front and Clay street, up stairs, ap16

PERRY & LEICHTER—Wholesale Dealers and Jobbers in choice Wines and  
Liquors No. 508 Battery, orders delivered free of charge. ap16

## GENERAL FOUNDRY ESTABLISHMENT AND MACHINE WORKS.

PALMER, HANSCOM & CO., Proprietors.

Golden State Foundry, First street,  
near Market, San Francisco.

KNOX'S LATE IMPROVED AMALGAMATOR.

(Manufactured and for sale at the Golden State Foundry,  
San Francisco.)

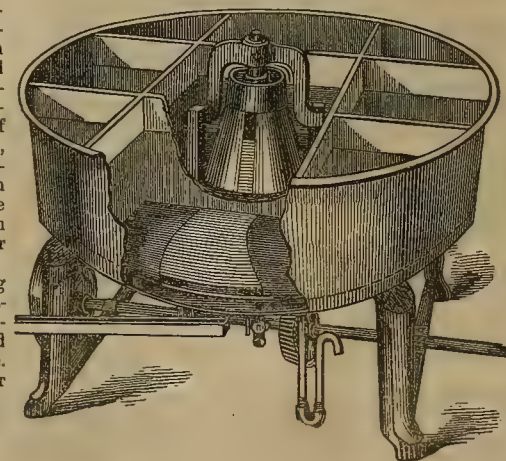


Palmer, Hanscom & Co., proprietors of the above well established and favorably known works, throughout the Pacific States, desire to call the attention of mining companies, mill owners, and others requiring machinery of any description, to the fact that they are enabled to execute any and all orders of whatever nature at the shortest notice, and at GREATLY REDUCED PRICES.—Their works are the most complete in their appointments on this coast. These gentlemen guarantee entire satisfaction to all who may favor them with their patronage.

Mining machinery, such as crushing mills and improved Knox's Amalgamators, (the best for extracting the precious metals) kept constantly on hand and manufactured at the shortest notice.

Send drawings and specifications for estimates, and address,

PALMER, HANSCOM & CO.,  
Golden State Foundry,  
San Francisco, C 1





## DR. L. J. CZAPKAY'S

## PRIVATE MEDICAL &amp; SURGICAL INSTITUTE.

Sacramento street, below Montgomery,

Opposite the Pacific Mail Steamship Company's Office,  
SAN FRANCISCO.Established in 1854 for the Permanent Cure of all Chronic  
and Private Diseases, and the suppression of Quackery.Attending and resident Physician, Dr. L. J. CZAPKAY, M. D. in the late  
Hungarian War, Chief Physician to the 20th regiment of Honvéd; Chief  
Surgeon to the Military Hospital of Pesth, Hungary; the late lecturer on  
Santo Urinary Organs and Diseases of Women and Children; and Honorary  
member of the Philadelphia College of Medicine.Particular attention paid to the treatment of diseases peculiar to Women  
and Children.Office Hours—From 9 A.M. to 9 P.M. Communications strictly confidential.  
Permanent cure guaranteed or no pay. Consultations, by letter or other-  
wise, free. Address,

L. J. CZAPKAY, M. D.

## TO THE AFFLICTED.

Dr. L. J. CZAPKAY returns his sincere thanks to his numerous patients  
for their patronage, and would take this opportunity to remind them  
that he continues to consult at his Institute for the cure of all forms of Private  
Diseases—such as Syphilis Gonorrhea, nocturnal emissions, and all  
the consequences of self abuse. In the first stages of syphilitic or gonorr-  
rheal diseases, he guarantees a cure in a few days, without inconvenience to  
the patient or hindrance to his business. When a patient, by neglect or  
improper treatment, has developed the secondary symptoms of syphilis,  
such as buboes or painful swellings on the groins, or ulcers in the throat and  
nose, which, if not checked, destroy the soft parts and cause the bones to  
rotify, separate and come away, leaving the sufferer an object hideous to  
behold, or when blotches and pimples break out on the skin, or when he  
has painful swellings upon the bones, or when his constitution is injured so  
as to predispose to consumption or other constitutional disease, the Doctor  
guarantees a cure or asks no compensation.In rheumatism, chronic or acute; in dysentery or diarrhea, he has safe  
and effectual remedies. For the treatment of the consequences of self-abuse  
—such as nocturnal emissions, nervousness, timidity, headache, pains in the  
back and limbs, with general weakness, loss of appetite, loss of memory,  
tendency to the right, redness, confusion of ideas, dislike for society, and a  
feeling of weariness of life, with the nervous system so excitable that slight  
noises shock or startle the patient, making his existence miserable. For the  
above maladies the Doctor will guarantee a cure, or ask no compensation.  
He can be consulted free of charge, and invites all to call, as it will  
cost them nothing, and may be much to their advantage. Office hours from  
9 A.M. to 9 P.M.Dr. L. J. Czapkay is daily receiving applications from every part of this  
State and from Oregon and Washington Territory, for the treatment of  
every form of disease, and there is not one who will come forward and ex-  
press dissatisfaction; on the contrary, the Doctor is in daily receipt of letters  
expressive of gratitude and thankfulness, some of which are published be-  
low by permission.Dear Sir—Having entirely recovered from my sickness, I avail myself  
of this opportunity to return my thankful acknowledgments for the relief that  
you have given me. When I think of the distressing bodily weakness under  
which I have suffered, and the nervousness, headache, fearfulness, want of  
confidence, dizziness, redness, weakness, weakness in the limbs, loss of memory,  
confusion of ideas, dislike for society, nocturnal emissions, and many other  
symptoms, which had made my life miserable, I can hardly express the grati-  
tude I feel, for my existence had become a burthen to me, and nothing af-  
forded me the least gratification, whilst now I feel perfectly well and can en-  
joy life to my entire satisfaction. Knowing that there are many afflicted as I  
have been, you have permission to make use of this letter as you may think  
proper. Believe me gratefully yours,

M. MICHELS.

To Dr. L. J. Czapkay, San Francisco.

Dr. L. J. Czapkay, San Francisco: Sir—I have used the last of your medi-  
cine, and do not think I shall need any more, as I feel very well, except that  
I have not entirely got my strength yet, but soon will with the appetite that  
I have. It is just three weeks, you may recollect, since I called at your In-  
stitute, with my constitution, as I thought, entirely broken, and never  
thought you would be able to cure me perfectly, but thought you might be  
able to do something to ease the pain in my back and head, and strengthen  
my limbs, which were so weak that they would almost give way under me,  
when I walked, and strengthen my nerves so that I would not get excited  
and tremble at every little thing. Now, that you know what I expected,  
you may judge of my satisfaction at my complete recovery from those  
symptoms, and the removal of those blotches and sores from my skin and  
the ulcers from my throat, and the entire disappearance of these emissions, which  
you said were principally the cause of my sickness.I can hardly tell you which is the greatest, my joy or my surprise, for ex-  
cept not having got my strength, I felt as well as any man can feel.Enclosed I send you Twenty Dollars over your charge, and think myself  
cheaply cured. If you think anybody will be benefited, you may put this  
letter in the newspapers. Believe me gratefully yours,

THOMAS HAYDEN.

## [CERTIFICATE.]

The undersigned desirous of acquainting those who may be unfortunate  
enough to be similarly afflicted where a permanent relief of their sufferings  
may be obtained, feels it his duty to publicly express his sincere grati-  
tude to Dr. L. J. Czapkay, for the permanent recovery of his health. Borne  
down by the distressing symptoms incident to the vicious practices of un-  
controllable passion in youth, depressed in body and mind, unable to perform  
even the most trifling duty imposed upon the daily avocations of life, I  
sought the advice of many physicians, who at first regarded my disease as of  
trifling importance, but alas! after a few weeks, and in several instances  
months, of their treatment, I found to my utterable horror, that instead  
of relief my symptoms became more alarming in their torture, and being  
told by one that the disease being principally confined to the brain, medi-  
cines would be of little consequence; I despaired of ever regaining my health,  
strength and energy; and as a last resort, and with but faint hope, I called  
upon Dr. Czapkay, who, after examining my case, prescribed some medicine  
which almost instantly relieved me of the dull pain and dizziness in my  
head. Encouraged by the result, I resolved to place myself immediately un-  
der his care, and, by strict obedience to his directions, and advice, my head  
became clear, my ideas collected, the constant pains in my back and groins,  
the weakness of my limbs, the nervous reaction of my whole body on the  
slightest excitement, the misanthropy and evil forebodings, the self-distrust  
and want of confidence in others, the incapability to study and want of re-  
solution, the frightful, exciting, and at times pleasurable dreams at night,  
followed by involuntary discharges, have all disappeared, and, in fact, in  
two months after having consulted the Doctor, I felt as if inspired by a new  
life, that life which, but a short time ago, I contemplated to end by my own  
hand.With a view to guard the unfortunate from falling into the snares of in-  
competent quacks, I deem it my duty to offer my testimony to the merit  
and skill of Dr. Czapkay, and recommend him to all who may stand in need  
of medical advice, being assured by my own experience that, once under his  
care, a radical and permanent cure will be effected.

B. F. FILLMORE, [L.S.]

State of California, city and county of San Francisco—Subscribed and  
sworn to before me, this 17th day of April, A. D. 1856.

(Signed) JOHN MIDDLETON, Notary Public.

PACIFIC FOUNDRY AND MACHINE SHOP, First Street, between Mission  
and Howard, San Francisco, California. By recent additions to be-  
fore extensive establishment, we can confidently announce to the public  
that we now haveThe Best Foundry and Machine Shop on the Pacific  
Coast.With upwards of forty-five thousand dollars worth of patterns, we are en-  
abled to do work cheaper and quicker than any other establishment on this  
side of the Rocky Mountains.We make to order, and have for sale, High and Low Pressure Engines,  
both Marine and Stationary; Straight Quartz Mills of all sizes and  
designs; Stamp shoes and dies of iron, which is imported by us expressly  
for this purpose—its peculiar hardness making shoes and dies last two or  
three months. Mining Pumps of all sizes and kinds; Flouring Mills, Gang,  
Sash, Mule, and Circular Saw Mills; Shingle Machines, cutting 25,000 per  
day, and more perfectly than any now in use. One of these shingle machines  
can be seen in operation at Metcalf's mill in this city.Knox's Amalgamators, with the latest improvements; Howland & Hans-  
com's Amalgamator; Goddard's Tub, lately improved, in fact, all kinds now  
in use.Quartz Screens, of every degree of fineness, made of the best Russia Iron.  
Or Wheels and Axles of all dimensions; Building Fronts: Horse Powers;  
Smut Mills; Boiler Fronts; Wind Mills, of Hunt's, Johnson's and Lum's Pat-  
ent; and to make a long story short, we make castings and machinery of  
every description whatever; also, all kinds of Brass Castings.

Steamboat work promptly attended to.

Thankful to the public for their many past favors, we would respectfully  
olicit a continuance of their patronage. Before purchasing, give us a call  
and see what we can do.

GOLDARD &amp; CO

## ADVANTAGES

—OF—

## BRYAN'S IMPROVED MILL.

THIS MILL will Crush, with the same weight

of Stamps, Twenty-Five per cent. more rock

than any other mill yet invented. It is also

Cheaper, more Durable and run with Less

Power. All parts of it being fitted together

before leaving the shop, it can be put up

set at work Crushing the Ore, in Ten Hour

ter arriving on the ground!

Every one exclaims after seeing the Mill in

operation, "Why has not so perfect and ye

simple a mill been invented before? It would

have Saved the Fortune of many a Miner

expended in worthless machinery, and enriched

the STATE A THOUSAND FOLD!"

## QUARTZ MILL SCREENS

Of all sizes, furnished with dispatch.

## ADOPTED AND NOW USED BY

Eastern Slope Gold and Silver Company, } Washoe  
Barbota Mill Company, }  
Ophir Mining Company, }  
Union Reduction Company, } San Francisco  
Ogden & Wilson. }

## THE FOLLOWING GOODS TO BE FOUND AT

## H. D. PEARCE'S:

Gents' Heavy Gold Cases, different patterns;  
Ladies' Heavy Gold Cases, do do;  
Gold Telescopic Pen and Pencil Case;  
Extension Screw, Heavy Silver, for Gents';  
Extension Screw, Heavy Silver, for Ladies';  
Silver Extension Cases;  
Silver Telescopic Cases;  
Screw, Silver and Ebony Desk Holders;  
Slide Silver and Ebony Desk Holders;  
Reverse Silver and Ebony Desk Holders;  
Pen Holders, Silver and Ebony;  
Pen Holders, Gold and Ebony;  
Pen Holders, Gold and Ivory;  
India Rubber Propelling Pen and Pencil Cases;  
India Rubber Propelling Pencils, short.All the above goods are made to order and warranted; will be sold  
cheap for cash. There are some thirty different patterns, leaving an oppor-  
tunity for parties to select and be suited.

A cheaper class of Pens direct from New York, at wholesale only.

Gold Pens constantly on hand. Gold Pens repaired.

H. D. PEARCE,  
606 Montgomery street, between Clay and Merchant, up stairs.THEODOR KALLENBERG,  
MAKER OF MODELS  
for Inventors,MACHINES, MATHEMATICAL Optical and Philosophical instruments,  
Scales, Weights, etc.; Steel Stamps, Dies and die sinking, EmbossingStamping.  
Repairing of machinery promptly attended to. au7-3m  
(No. 4 Sansome street, corner Market, San Francisco.)

## A. ROMAN &amp; CO.

WHOLESALE AND RETAIL

## BOOK ESTABLISHMENT.

417 and 419 Montgomery street,

SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular  
Metallurgical Operations, Etc. Etc. By Frederick Overman.A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.  
Manual of Metallurgy, more particularly of the precious metals; but includ-  
ing such others as are employed in dental practice.Records of Mining and Metallurgy, or Facts and Memoranda for the Use of  
the Mine Agent and Smelter. By James Phillips and John Darlington.

Piggot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Phillips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell.

Silver Ores and Silver Mines, by Prof. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weissbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

Together with many other works in this &amp; similar lines

Books imported to order on short notice.

## A. ROMAN &amp; CO.,

417 &amp; 419 Montgomery Street.

## DEVOE &amp; CO.'S

## STEAM ENGINE

—AND—

## MACHINE WORKS,

Corner Market &amp; Fremont streets, San Francisco.

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILL  
Irons, Flour Mills, Quartz Mills, etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT  
Cutting

AGRICULTURAL MACHINERY of all kinds made and repaired.

Duplicate parts of Threshing and Reaping Machines and  
Threshing Teeth made to order, on the most reasonable terms.Steam Engines and Boilers constantly on hand, and for sale  
cheap. Screw-Cutting Turning Lathes for sale.

je13

DEVOE &amp; CO.

## WHEELER &amp; WILSON'S

## Family Sewing Machines,

WITH NEW IMPROVEMENTS,

JUST RECEIVED,

ARE THE ONLY PERFECT MACHINES FOR

STITCHING, BINDING,

HEMMING, CORDING,

QUILTING, TUCKING,

FELLING, GATHERING,

AND EMBROIDERING.

AS ALSO, THE

MOST ECONOMICAL FAMILY SEWING MACHINE

IN USE.

Call and see the improvements.

H. W. WADSWORTH, Agent,  
Corner Montgomery and Sacramento sts.

au7

## WHILE YOU HAVE THE MONEY,

MAKE SURE OF A HOME!

## NEVER HAZARD THE LAST DOLLAR!

To Cariboo and Salmon River Miners, and all others  
who wish to purchase LOTS in San Francisco with a  
PERFECT TITLE:The undersigned will sell Building Lots for from \$10 to \$200. Also  
50-acre Lots and entire Blocks of the most beautiful gardening lands in the  
city and county of San Francisco, on the line of and at the WEST END DEPOT OF  
THE SAN FRANCISCO AND SAN JOSE RAILROAD. Persons desiring to invest a few  
dollars, or hundreds, or thousands of dollars, would do well to call on the  
undersigned, as he deals ONLY IN LANDS WITH A PERFECT TITLE, to wit: those  
held under

A PATENT OF THE UNITED STATES!

Persons residing in the interior, or who are about to go to the Cariboo or  
Salmon River Mines, can purchase this property and leave it without any  
fear of adverse claims or titles springing up in their absence.The undersigned will, if desired, give his personal attention to the assess-  
ing, paying of taxes, etc., on all lots purchased from him, and will forward  
to each non-resident purchaser his tax receipts, free of all cost save the  
actual amount of the taxes.Office—No. 19 third floor of Naglee's Building, (south-west corner of Mer-  
chant and Montgomery streets.)

m8-1f

HARVEY S. BROWN.

TURNHAUER & ZINN—French and German Fancy Baskets, Willow Ware,  
Chairs, Ladies Work Stands, etc., 320 and 322 Battery st.

ap16



## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual lost was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

For parting silver from gold when gold is below 300-1000ths. fine.....3cts per oz.  
" from 300-1000ths. to 750-1000ths fine. 7cts "  
" " 750-1000ths to 950-1000ths " 14cts "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
301 " 500, 7cts. " " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths. cents per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

In regard to the deposits of *Washoe silver*, the rule will hereafter be, that the value of gold contained in the same will be paid in gold coin, and the value of silver in silver coin. The value of the silver will be calculated at \$1.21 per standard oz., and is exempted from the coinage charge, unless deposited for silver dollars, in which case a charge of  $\frac{1}{2}$  per cent. will be made additional. Bullion of the above denomination will be entered on the gold and silver register, as most congruous with the physical aspects of the material, but in the warrant it must be marked that so much is to be paid in gold and so much in silver, according to the contents reported by the assayer. The above rules, and charges were promulgated on July 10th, by Superintendent Robert J. Stevens.

U. S. BRANCH MINT, Nov. 6th, 1861.

On and after the 15th inst., a charge varying in accordance and the character of the deposit, from half a cent to three cents per oz., gross, in addition to the general rates, and be imposed on all bullion deposited for coinage or manufacture, which will require toughening or extra refining to render it suitable for mint purposes.

ROBT. J. STEVENS, Superintendent.

J. B. KNAPP, WM. WADHAMS, }  
San Francisco, Cal. } WM. S. BURRELL,  
Portland, Oregon.

KNAPP, BURRELL & CO.,

Commission Merchants and  
Jobbers of California and Oregon Fruit,  
Produce, Leather, &c.,

No. 310 Washington street, near Front, San Francisco.  
Orders and consignments solicited. au21-3m

## FOR SALE.

TEN DOLLAR LOTS; also 50-Vara Lots, and entire blocks of beautiful Garden land, on the line of the San Jose Railroad, at the West End Depot Title perfect,—being held under a patent from the United States.  
Office No. 19, third floor of Naglee's Building, at the southwest corner of Merchant and Montgomery streets.

HARVEY S. BROWN.  
Feb.

San Francisco Jan. 27, 1862.

ORO HOTEL, Fire-Proof Brick Building, No. 49 K street, Bet. Second and Third, Sacramento City, Jas. Smith, Prop'r.

R. F. ROCCHICCIOLI, Electrotyper, and Silver Plater. 153½ California Street, between Kearny and Montgomery sts. ml

J. PERRAULT, M. D., Physician and Surgeon, office in the Drug Store, 73 Davis street, between Washington and Clay. m8.

EDWARD F. OHM, Watches, Jewelry, Etc. 615 Montgomery street near Merchant. Watches and Jewelry repaired. ml

## HOSTETTER'S STOMACH BITTERS.

They renovate, purify and strengthen the system, and aid the stomach in the performance of its functions. It is a sovereign specific for imparting strength, vigor and tone to the system, and possessing the curative powers for all diseases arising from a disordered stomach.

## DYSPEPSIA,

In all its forms, yields to its control and invigorating properties, and that its return is effectually prevented and the digestive powers preserved in the fullest vigor by a subsequent occasional use of this remarkable invigorant. The disease would seem to have an infinite variety of

## SYMPTOMS:

Among these are constant pain or uneasiness at the pit of the stomach, oppression after eating, spasms in the stomach and diaphragm, morning nausea, pain between the shoulders, fluttering of the heart, constipation of the bowels, irritability, broken sleep, nightmare, loss of memory, dimness of sight, prostration of strength, dull, stupefying headache, want of appetite, flatulency, and a feeling of despondency and despair wholly independent of external causes. All the evils in this mournful catalogue are not merely alleviated, but invariably removed, by a few bottles of HOSTETTER'S BITTERS.

## LIVER COMPLAINT.

Persons who languish for years under apparently incurable affections of the liver, the symptoms of which are pain in the right side, pain in the back and loins, a yellow suffusion of the skin and whites of the eyes, extreme indigestion to exertion, complete loss of mental activity, despondency almost amounting to mania, and great bodily weakness, all which are vanquished by the soothing and invigorating properties of this restorative.

## TO PERSONS WHOSE HEALTH IS BROKEN DOWN.

When the flames of life wane and quiver from exhaustion, administer this famous restorative. It will once more become steady and strong. In the debility which follows violent fever, in diarrhoea, dysentery, dyspeptic complaints and cholera; in the weakness consequent upon natural decay, or resulting from free living or over-exertion, and also in those painful and too much neglected ailments to which ladies are exclusively subject, the Bitters never fail to give permanent relief.

## CALIFORNIANS

Should test the merits of Dr. Hostetter's Stomach Bitters. While it is highly palatable as a beverage, it is unequalled as a tonic and invigorant. In the pursuit of a fortune at the mines, many persons are exposed to attacks of complaints of the digestive organs, and of various kinds of fever. It is the very article that has so long been in demand at the mines.

## FEMALES.

Thousands of ladies resort to it as a remedy for hysteria, fluttering of the heart, nervous headache, vertigo, general debility and all peculiar disturbances and derangements to which, as a sex, they are subject. It cheers and lightens the depressed mental powers as well as strengthens the body, and its use is never followed by any unpleasant reaction.

## A WORD TO THE AGED.

In the decline of life, the loss of vital force consequent upon physical decay, can only be safely supplied by some vivifying preparation which recruits the strength and spirits, without entailing the exhaustion which is always the final effect of ordinary stimulants. It tones the stomach, improves the appetite, acts like a charm upon the spirits.

## BOTH SEXES,

Who suffer from general debility, without any physical pain or other symptoms of a deranged organization, will find great benefit from their vivifying influence on the frame and constitution; and where there is a deficiency of vital force they communicate the energy and vivacity which nature has neglected to supply.

The feeble girl, the ailing wife, the nursing mother, the overtasked man of business, the man of pleasure, under the reaction that follows over-exertion, and all who have a predisposition to paralysis, will do well to resort to this incomparable tonic and restorative.

## DR. HOSTETTER'S STOMACH BITTERS

Should be in the possession of everybody in the mining region. As a preventative against various diseases to which the gold seeker is liable, it has no superior. In all cases of Diarrhoea, Dysentery, and the prevailing fevers consequent upon exposure, the Bitters will be found invaluable as a corrective.

## COUNTERFEITS.

Counterfeits are said to be the homage paid by knavery to success, and from these left-handed compliments Hostetter's Stomach Bitters have not been exempted. Vile imitations of the article are abroad, and the public are earnestly requested to be on their guard against them.

Sold by druggists and dealers everywhere.

HOSTETTER, SMITH & DEAN,  
Sole Agents for the Pacific Coast.

227 Montgomery street (Russ Block), San Francisco. [au28]

## CORN AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skilful and scientific Professors of Philadelphia, and having made this branch of surgical science my speciality for nine years, enables me to operate skilfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can recommend you with confidence to the citizens of San Francisco, as one of the most skilful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertion in the new and growing city of the Pacific.

We subscribe ourselves yours,  
Rev. W. Stanton, L.L.D.,  
Richard A. Vaux,  
Dr. Straud, M.D.,  
Dr. Loomis, M.D.,  
Cleopole Stevens, M.D.,  
Samuel Pancelot, M.D.,  
Walter C. Foster, M.D.,  
S. W. Howard, Att'y at Law,  
Pierce Butler,  
Henry B. Linton, M.D.,  
Wm. L. Howard, M.D.,  
Philippe Lidy, M.D.,  
Myers Davis, M.D.,  
W. M. Thompson, M.D., and others.

No. 718 Catharine street—this is to certify that Dr. Kennedy has removed corns and bunions off my feet, which have annoyed me for years. He also removed a cancer from my middle finger, which I had no use of for a period of six months. I cordially commend him to the suffering humanity of Philadelphia as a skilful surgeon.

## REFERENCES:

John Corbott, M.D.,  
Capt McClure,  
Wm. H. Mills, Jr.,  
Rev. Walter W. Stanton, L.L.D.,  
Samuel W. Howard, Att'y at Law,  
Cleopole Stevens, Pharmacist,  
Mrs. Smith, Greene street,  
Mrs. W. L. Howard,  
Walter O. Foster, Com Mer, Third st,  
Myers Davis, Market st, above Fifth,  
Major Consock,  
Mrs. W. Patridge, Walnut street.

From Dr. W. L. Stevens: Dr. Kennedy has operated upon my feet, and has effectually cured me of some torturing pests that I have been annoyed with for years.

From the Rev. Walter M. Thompson: This is to certify that while sojourning in Philadelphia, Dr. Kennedy has operated on three of my family to my entire satisfaction.

From the Hon. Wm. M. Thorne, ex-member of the Ohio Legislature: This is to certify that I called on Dr. Kennedy to operate on my feet: He displayed great skill as a surgeon, and I am satisfied that he has effectually cured me of those torturing pests which have annoyed me for many years.

From Geo. F. Omerly, 637 Arch street: This is to certify that I called on Dr. Kennedy. He has operated on my feet to my entire satisfaction. au21

## 50 lbs. MARINE AND FIRE-PROOF PAINT

MANUFACTURED BY THE PACIFIC METALLURGICAL WORKS. IN THIS city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 lbs. Fire-Proof Paint,

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed Oil. If a lighter color is wanted, mix less paint, more lead.  
ROOF:—Five parts of Mineral Paint, one part white lead; mix with Linseed Oil. Put it thick on a tin Roof, as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. Forquer, Superintendent.

WORKS, North Beach; Office, 318 California st.,  
SAN FRANCISCO

KNAPP, BURRELL & CO—Commission Merchants, Dealers in Produce, Agricultural Implements, Leather, etc., 310 Washington. ap25

H. TYLER & CO—Dealers in Roasted and Ground Coffee, Spices, &c. S. Office, 220 Front street. Mills—cor. Fremont and Mission. ap25

NEWMAN BROTHERS, Importers and Manufacturers of Brushes &c. No. 226 Battery Street, San Francisco. my8



# Mining and Scientific Press.

A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, SATURDAY, NOVEMBER 8, 1862.

NO. 4.

MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC  
PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefitted by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers.—Four Dollars per annum.

## Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

W. B. EVER, Publisher,

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent Right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

## ARTS & SCIENCES



## Distance to which Sound will Travel.

The cannonading at the first battle of Bull Run was heard in Preston county, Virginia, 124 miles distant. At a place called The Glades The sounds were faint, yet distinct, and so obviously due to artillery as to attract the attention of very many people and produce the conviction that a battle was going on, though it was supposed at the time to be at no great distance. Two persons in particular, gave close attention to the reports during most of the time. Two young ladies, also, of the family of Mr. Freeland, went after dinner to the top of a hill near by, where they heard the reports more distinctly, and remained there listening an hour or more. At night people came in from the neighborhood to learn where the battle had been.

At Kingwood, the county seat, the cannonading was heard more distinctly than at The Glades, the place being on higher ground.

Army officers at Oakland, some 15 miles west of Kingwood, on the Baltimore and Ohio Railroad, heard the same, and said a battle was going on.

The subject was a matter of common remark that day, and the next, before the news of any battle had been received. The sound came from the east or southeast. The day was clear and calm, with little or no wind. The next day the wind was from the east, with rain. The places named are nearly at the summit of the Alleghenies. Kingwood is about 125 miles from Bull Run in an air line.

The above facts were communicated by Mr. C. S. Lyman, to Professor Silliman of Yale College, by whom they were published in his Journal of Science, with the following comments:—

It is a commonly received opinion that sound travels farther and more loudly on the earth's surface than through the air—thus the cannonading at Jena in 1806 was very feebly heard in the open fields about Dresden—distance 92 miles—but very distinct in the casemates of the fortifications of Dresden. The Glades are nearly at the height of land of that part of Virginia, probably not less than 2500 feet above the sea. It is certain that at a great number of places within a radius of 125 miles from Stone Bridge, where the Bull Run cannonading occurred, the sound was not heard—and it seems probable that its distinctness at The Glades was due chiefly to the elevation of that place. It is well known from the experience of aeronauts that sounds are heard with much greater distinctness from the earth to a balloon than on the earth from the balloon. In deep valleys sound may be cut off by reflection, the mountains acting as screens—while the same sounds are distinctly heard on eminences at greater distances.

This is probably the greatest distance at which cannonading was ever heard.

CAPT. Erickson says that either of his two new Monitors will, by their great strength and wedge-shaped prow, be able to split an iceberg.

COPPER ORE.—The Messrs Molitor of this city have recently received a quantity of specimens from the Burri-Burri copper mines, Australia, which are quite interesting curiosities in their way. They also possess much geological interest.

IMPROVEMENTS IN IRON AND STEEL.—At a late meeting of the London Institution of Civil Engineers, a general retrospective view was given of the material progress of the world and the improvements which had been made in the iron manufacture during the last few years, and the changes that were now taking place were referred to; and it was stated that the result had been that, whereas the annual "make" of a blast furnace in the year 1750 was only about 300 tons, now it ranged from 5,000 to 10,000 tons per annum; and, in a few cases, amounted even to 15,000 tons per annum. In reference to wrought iron, it was said that the plan of reversing the rolls had been considerably extended, and occasionally a second pair of rolls had been placed close to the first, running continually in the opposite direction, so that the iron could be rolled either in coming forward, or in going back. Plates 1½ in. thick, by 3 feet wide, and 20 feet long, and plates 4½ in. thick by 3 feet wide and 15 feet long had been rolled, as well as bars up to 72 feet long. Most of the improvements in the manufacture of steel had been introduced within the last half century. Cast steel bells, weighing 5,300 pounds had been made in this country, and castings of steel weighing 10,000 pounds in Austria. Large plates and very heavy bars had been made of puddled steel, produced direct from cast iron; and, lastly, steel wire, when hardened to about a deep blue temper, was found capable of carrying 130 tons per square inch. More than one process had been used in the production of cheap steel, which had been found by recent experiments to possess nearly double the strength of ordinary iron, accompanied by other valuable properties. With regard to the application of iron, a new era commenced with the construction of the Conway and Britannia Bridges; as the elaborate experiments made prior to their construction tended to prove that previously received theories were in some respects erroneous. Again, the building erected for the Great Exhibition in 1851, from its lightness and security, called attention to the hitherto undeveloped capabilities of the combined use of cast and wrought iron for such purposes.

COAL WASTED BY BREAKING.—An immense amount of coal is wasted in the coal mines by the process of breaking up the coal into the proper size for market. In this operation a large percentage of coal is finely pulverized, and is thrown aside as unsaleable. This fine and wasted coal is of the purest quality. A correspondent of the New York World, writing from the Pennsylvania coal mines, states that at a single colliery, doing a good business, four hundred tons of coal a day is made to pass through the machine for breaking up the lumps, and the waste is about twenty per cent., or eighty tons daily. All this amount has to be mined, brought to the breaker, (two iron cylinders, with iron teeth, revolving in a horizontal position, paneled to each other, and about ten inches apart,) and after this process of destruction, has to be carried away and piled up. One will see at any colliery of several years' standing, hundreds of thousands of tons of this now worthless article—very pyramids. All this, except what little is made in the mines by blasting, has to be paid by the operator, and is a loss to the owner of the land as well as to the human family, and adds price to that which the consumer buys in the market. The waste at the collieries in Schuylkill and Luzerne counties, Pennsylvania, is believed to be over one million tons annually, worth \$5,000,000. The question is now asked, is there no way to save this valuable fuel? Here is a chance for inventors. Artificial fuel is now made in England from coal dross combined with a small amount of adhesive substance, such as coal tar, and it is used on long voyages by many of the best steamships. This artificial fuel is pressed into blocks, and is well adapted for packing in coal bunkers.

A new asteroid was discovered Sept. 25th. It is in the constellation Pisces, and is of the eleventh magnitude.



## SCIENTIFIC BALLOON ASCENSION.

An interesting balloon ascension was recently made in England by Mr. Glaisher, for scientific purposes. The ascension was made in the mammoth balloon belonging to Mr. Coxwell, who accompanied Mr. G. as aeronaut. The adventurers reached the highest point, above the earth, ever visited by man, and their observations have added an interesting and important chapter to the history of science.—The expedition was carried to an extent exceedingly dangerous, and indeed, was near proving fatal to one of the parties. We append the chief points of interest as given more in full in their published narrative:—

THE FREEZING POINT was found at the height of two miles. At an elevation of three miles the thermometer stood at 18° above zero and at five miles 2° below and no dew was observed on the hygrometer when cooled down to minus 30°. Up to this point the observer, Mr. Glaisher, had experienced no difficulty in breathing, while Mr. Coxwell, in consequence of the necessary exertion he had to make, had breathed with difficulty for some time.

DIMNESS OF SIGHT began to be experienced at an elevation of five and a quarter miles, which Mr. G. thus narrates:

At a height of about 5½ miles, I read the dry bulb as minus 5°; in endeavoring to read the wet bulb I could not see the column of mercury. I rubbed my eyes, then took a lens, and also failed. I then tried to read the other instruments and found I could not do so, nor could I see the hands of the watch. I asked Mr. Coxwell to help me, and he said he must go into the ring, and he would when he came down. I endeavored to reach some brandy, which was lying on the table at about the distance of a foot from my hand, and found myself unable to do so.

TOTAL LOSS OF POWER was indicated at about five and three quarter miles elevation, as will be noticed from the following continuation of the above paragraph:—

My sight became more dim: I looked at the barometer and saw it between 10 and 11 inches, and tried to record it, but I was unable to write. I then saw it at 10 inches, still decreasing fast, and just noted it in my book; its true reading, therefore, was at this time about 9¾ inches, implying a height of about 5¾ miles, as a change of an inch in the reading of the barometer at this elevation takes place on a change of height of about 2,500 feet. I felt I was losing all power, and endeavored to rouse myself by struggling and shaking. I attempted to speak, and found I had lost the power. I attempted to look at the barometer again; my head fell on one side. I struggled and got it right, and it fell on the other, and finally fell backward.

My arm, which had been resting on the table, fell down by my side. I saw Mr. Coxwell dimly in the ring. It became more misty, and I sank unconsciously as in sleep. I then heard Mr. Coxwell say, "What is the temperature? Take an observation; now try." But I could neither see, move nor speak. I then heard him speak more emphatically. "Take an observation: now do try." I shortly afterward opened my eyes, saw the instruments and Mr. Coxwell very dimly, and soon saw clearly, and said to Mr. Coxwell, "I have been insensible;" and he replied, "You have, and I nearly."

I recovered quickly, and Mr. Coxwell said, "I have lost the use of my hands; give me some brandy to bathe them." His hands were nearly black. I saw the temperature was still below zero, and the barometer reading 11 inches, but increasing quickly. I resumed my observations. I found that the water in the vessel supplying wet bulb thermometer, which I had by frequent disturbances kept from freezing, was one solid mass of ice. Mr. Coxwell then told me that while in the ring he felt it piercingly cold, that hoar frost was all round the neck of the balloon, and on attempting to leave the ring he found his hands frozen, and he got down how he could; that he found me motionless, with a quiet and placid expression on the countenance. He spoke to me without eliciting a reply, and found I was insensible. He then said he felt insensibility was coming over himself; that he became anxious to open the valve; that his hands failed him; and that he seized the line between his teeth, and pulled the valve open until the balloon took a turn downward.

Mr. Glaisher is of opinion that the balloon, during their state of partial insensibility, and at the time Mr. Coxwell opened the valve with his teeth, must have stood at an altitude of 6, if not 6½ miles from the earth!

Six pigeons were taken up. One was thrown out at the height of three miles; it extended its wings and dropped as a piece of paper. A second, at four miles, flew vigorously round and round, apparently taking a great dip each time. A third was thrown out between four and five miles, and it fell downwards. A fourth was thrown out at four miles, when we were descending; it flew in a circle, and shortly after alighted on the top of the balloon. The two remaining pigeons were brought down to the ground. One was found to be dead, and the other (a carrier) had attached to its neck

a note. It would not, however, leave, and when jerked off the finger, returned to the hand. After a quarter of an hour it began to peck a piece of ribbon encircling its neck and I then jerked it off my finger, and it flew round two or three times with vigor, and finally towards Wolverhampton. Not one, however, had returned there when I left on the afternoon of the 6th.

Mr. G. adds the following by way of inference;

It would seem from this ascent that five miles from the earth is very near the limit of human existence. It is possible, as the effect of each high ascent upon myself has been different, that on another occasion I might be able to go higher, and it is possible that some persons may be able to exist with less air and bear a greater degree of cold; but still I think that prudence would say to all, whenever the barometer reading falls as low as 11 inches, open the valve at once; the increased information to be obtained is not commensurate with the increased risk.

The London Times, commenting upon the perilous enterprise, observes:

The aerial voyage just performed by Mr. Coxwell and Mr. Glaisher deserves to rank with the greatest feats of our experimentalists, discoverers and travelers. It is true these gentlemen have not brought down a very comfortable or inspiring report of the upper world into which they have penetrated. Science and poetry are unhappily rather at variance upon the subject of the air and the sky. Poetry points upward to the sky with glowing rapture as the scene of brightness and glory, and a residence there figures as the reward of heroism and greatness. Everything is happy and splendid that is connected with the sky. But science penetrates with its material eye into those vast upper spaces and simply reports a great difficulty of breathing there; that the blood stagnates, the limbs become benumbed, the senses evaporate, and nature faints in unconsciousness. The very birds will not fly in that very sky which is their poetical home. The distinction is that poetry looks up to the sky from below, and science examines and feels it on a level. The sky is the emblem of poetry, the fact of science. Both aspects of it are equally true, but the point of view from which they are taken is quite different. But, though our recent explorers of the sky do not add to its brilliancy as a picture, they have furnished one more striking and impressive scene to the history of science. They have shown what enthusiasm science can inspire and what courage it can give. If the man, as the poet says, had need of "triple steel about his breast" who first launched a boat into the sea, certainly those had no less need of it who first floated in the air six miles above the surface of the earth.

MARK WEST CREEK COAL.—The newly opened coal mine is a matter of no ordinary interest to the people of this part of the country, and great hopes are entertained of its extent and value. A sample load of the article was shipped on Wednesday to San Francisco, where judgement will be pronounced of its merit. Should the quality prove good, no one as yet doubts of the quantity obtainable. The company, styled the Healsburgh Coal Mining Company, was formed about the first of May, and has been prospecting up to the present time, having, at the depth of 126 feet, found a ledge of coal that works well in a forge, and we think will turn out better than any yet found in the State for the manufacture of gas. We understand the company intend furnishing the Petaluma steamers a sufficient quantity to prove its efficacy for steam and foundry purposes.

On the 6th ult. the first meeting of the company under its incorporation was had, when the following officers were elected:

President—W. J. Harrison; Secretary—J. G. McManus; Treasurer—G. H. Peterson; Superintendent—B. C. Wattles.—Healsburgh Review.

MAGNIFICENT VIEW OF THE LATE BATTLE OF ANTIETAM. A correspondent of the New York Tribune writing of the great battle of Antietam, on Wednesday, September 17, says: The opportunity for seeing the battle was unparalleled. A single stand point commanded nearly the whole field from dawn to dark. No one who looked upon that wonderful panorama can describe it; neither can any one who saw forget. Contrary to his usual policy the enemy met us in open country, and he was pressed back. But every hill and valley, every corn-field, grove and cluster of trees was fiercely fought for. The artillery was unceasing; we could often count more than sixty guns to the minute; and the musketry was like the patter of rain drops in an April shower. On the great broken field were riderless horses and scattered men; clouds of dirt from shot and exploded shells, long dark lines of infantry swaying to and fro, with columns of smoke rising from their muskets—with flashes and white puffs from the batteries—with the sun shining on all this scene of tumult, and beyond it, upon the dark rich woods, and the clear blue mountains, flows the Potomac. Amid all the screaming of shot and thundering of cannon and whistling of balls with the fearful courage they brought, I saw no considerable breaking among our troops, save with several new regiments in Sumner's corps.

THE Mining Companies recorded in San Francisco, in the month of September represent—on paper—a capital of \$15,345,000.

SILVER MINING IN NORWAY.—The silver mines of the vicinity of Kongsberg, Norway, are now attracting the attention of the English mining public. It is reported that an English Company has purchased the Anna Sophia district, and intends to work it in a spirited manner. Operations have been suspended there since 1805. A correspondent of the London Mining Journal makes the following observations:—

The Kongsberg Mines are unquestionably very remunerative, but the State retains in its own possession the very limited territory where native silver is likely to be found in sufficient quantity to pay for working. A Norwegian company has for some years been exploring the most likely district in the neighborhood of the Kongsberg Mine, and every year considerable calls have been made. The other sets were taken up by speculators without capital, on the chance of selling them in London; though such a transfer is, by the conditions of the auction at which the sets were acquired, illegal. No doubt silver exists beyond the bounds of the Kongsberg sett, for innumerable trials by private parties, as well as by the Government, prove it; but the quantity has been in every case inadequate to meet the expenses; and whatever is found must be sold at a fixed rate to the royal smelting-house.

STRAIGHTENING A CHIMNEY STACK.—This operation, for restoring the colossal chimney at Port Dundas to a perpendicular and safe position, has been successfully completed.—This was accomplished by sawing several of the mortar beds between the courses on the side from which the chimney leaned, thereby allowing it to come back by its own weight, without the application of any external force. Only one draft was cut at a time, to guard against any shock which might have endangered the stability of the building; and, by keeping the saws wet, a bed of mortar was prepared for the superincumbent weight to settle down upon. Twelve cuts were made in this manner on different parts of the structure, which generally set before the saws had passed through half of the circumference, particularly in those made nearest the ground, where the weight was greatest.

Mr. Duncan Macfarlane, architect, by whose advice this method was adopted, superintended the undertaking. The principle dimensions of the chimney are:—Total height, 408 feet; from surface to top of the coping, 454 feet; outside diameter at foundation, 50 feet; at surface, 34 feet; at coping, 14 feet. According to calculations made by Professor Rankine, the building, independent of the adhesion to mortar, is capable of sustaining with safety a lateral pressure of 66 lbs. per superficial foot at its weakest point, being 11 lbs. more than the force of the greatest storm registered in this country.—North British Mail.

A great rarity in the shape of a coin has lately been sold in Paris, namely, a silver one struck off at Breslau, 1751. Among the persons employed at that time in the mint was an Austrian, who, out of hatred to Frederick II. of Prussia, who had taken possession of Silesia by right of conquest, conceived the idea of revenging himself on that monarch in the following manner: The motto on the coin, "Ein reichs thaler," [a crown of the kingdom,] he divided in such a manner as to make it read, "Ein reich stahler," (he stole a kingdom.) The king ordered these insulting coins to be all melted down, but some of them still exist.

A new field gun has been invented, designed to throw grape and canister with fearful rapidity and effect.—It consists of five barrels, a sliding breach, having a corresponding number of chambers in which the charges are inserted, the gunner having no occasion to go to the front of his gun. A shield of metal plate, at an angle of forty-five degrees, protects the gun and the cannoniers. It is easily constructed, and in an emergency may be effectually disabled. The chambers are formed by longitudinal bars, the whole securely bolted together. The bore is square. The inventor claims to be able to throw with a full battery nearly a thousand pounds of grape in every forty seconds. The gun, by a peculiar construction, scatters sideways only, not up and down, as in ordinary guns.

THE COAL FIELDS OF OHIO.—It is almost melancholy to contemplate the vast beds of coal and ore in the United States, and see how little there has been done to develop them, while we are annually paying Great Britain millions upon millions of dollars for iron manufactures. The coal fields of the single State of Ohio are larger than those of Great Britain, while the latter has been used with such skill and energy as to create a manufacturing industry and production, beyond anything the world has ever seen, in an equal space. Ohio can produce more than thirty times the coal it now produces annually. The entire amount of coal annually produced in Great Britain, may be mined in Ohio for 500 years, without exhausting more than one seam, while it is well ascertained that in a thousand feet in depth, there are four or five seams. The 12,000 square miles of coal in Ohio is scarcely a fourth part of the coal basin of which it is a part, comprehending large portions of Western Pennsylvania, Virginia, Kentucky, and Tennessee. This is the Eastern coal deposit of the North-Western States; but there is also a Western of still greater magnitude.



TO MINING COMPANIES.

We earnestly solicit from mining companies and associations the following blank statement, filled according to the data hereby accompanying. The purpose for which we seek this information is important to every citizen and stockholder on this coast; it would also be productive of beneficial results—i. e., inducing capitalists to invest in our mining operations, thereby infusing new life and vigor into business generally in our States and Territories. Little, if anything, is known of our metallic wealth in Europe or the Eastern States, hence we desire as much of the blank filled by you as may be interesting and instructive to the people of this State and those interested abroad.

We know of no mining district in Europe or America where this kind of information is not willingly rendered by parties owning property of this nature; and we know of no better medium for making public the richness of our mines. We shall send blanks to mine and mill proprietors for every quarter, and will gladly publish the contents for the information of the community:

Title of Company and names of officers for the year.	Am't of stock & value per share.	When incorporated

Location.	Average assays of ore.	Process employed and number of stamps.	General remarks.

Routes and Fares from San Francisco to Foreign and Domestic cities.

**Pacific Mail Steamship Company**—Steamers leave for New York via Panama, on the 1st, 11th and 21st of each month. 1st cabin, \$250; 2d cabin, \$200; 3d cabin or steerage, \$100.

**Nicaragua Steamship line**, Ross, Dempster & Co., agents. —Steamers leave for New York via isthmus of Nicaragua, on the 21st October, and semi-monthly thereafter. Price of fare not yet stated.

To Portland, Victoria, &c., \$60. Crescent City, Trinidad, &c., \$20 \$30. San Diego, Monterey, and Los Angeles, \$20 to \$30. Sandwich Islands, per sailing vessels, \$100 to \$150. Australia, sailing vessels, 1st class, \$250 to \$300, China and Japan, sailing vessels, 1st class, \$200 to \$250. Mexico, \$30 to \$50.

**California Steam Navigation Company** dispatch steamers daily to—Sacramento, \$5; Stockton, \$4; Petaluma, \$3. **Overland Mail Company**—Stages leave daily for St. Louis via Salt Lake; fare, \$200.

DEETKEN'S

Chemical and Metallurgical Works,  
ON SAN BRUNO ROAD, ISLAIS CREEK,  
SAN FRANCISCO.

**CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON.** ALL THE GOLD EXTRACTED BY CHEMICAL PROCESS. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov8-3m

Homesteads Cheaper than Proposed under the Shafter Bill.

UNDER THE PROVISIONS of what is known as the Shafter Bill, it is proposed to sell the city title to homestead lots for twenty-five to two hundred dollars each. The undersigned will sell homestead lots within the limits of the city, and miles nearer to the business centre than many of the lands covered by the Shafter Bill, and place the party in immediate possession of the same, without present trouble or prospective lawsuits, for from \$10 to \$20 each. THE TITLE is absolutely PERFECT, being a Spanish Grant, finally confirmed and patented by the United States. The Shafter Bill respects this title: the city authorities respect it; the District Court and the Supreme Court of the State, as well as the District Court and Supreme Court of the United States respect it; besides the TITLE HAS BEEN FOREVER QUIETED BY A FINAL DECREE AND JUDGEMENT AGAINST THE CITY so that there is not even a cloud or shadow upon it. Whoever purchases one of these lots will buy a lot, not a lawsuit. Office No. 19 Naglee's Building corner of Montgomery and Merchant sts. HARVEY S. BROWN. m22

REMOVAL.

**OFFICE OF THE PACIFIC METALLURGICAL WORKS** is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day. Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased. COPPER OBES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent, 318 California street, near Sansome, up stairs. my30

LEANDER RANSOM,  
CIVIL ENGINEER  
AND SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public works of the State of California for 7 years.

ALSO, STATE LOCATING AGENT.

And as such having the sale of  
600,000 ACRES OF THE STATE SCHOOL LANDS,  
At the low price of \$1.25 per Acre.

Terms—Twenty-five per cent. in cash, and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct 3m

**AGENCY FOR PATENTS.**—The undersigned having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETTLER & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, State City and County Assessor.  
REAL ESTATE AGENT,  
410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, LOANS NEGOTIATED

Washoe Stock Exchange,  
N. E. cor. Montgomery and Merchant sts.,  
SAN FRANCISCO.

L. W. NEWELL & CO.,  
Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities. sep20

THEODOR KALLENBERG,  
MAKER OF MODELS  
for Inventors.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments  
Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing  
Stamps. Repairing of Machinery promptly attended to. aul7.3m  
(No. 4 Sansome street, corner Market, San Francisco.)

DEVOE & CO.'S  
STEAM ENGINE  
—AND—  
MACHINE WORKS,

Corner Market & Fremont streets, San Francisco.

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILL  
Irons, Flour Mills, Quartz Mills, etc., made to order and repaired.

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT  
Cutting  
AGRICULTURAL MACHINERY of all kinds made and repaired.

Duplicate parts of Threshing and Reaping Machines and  
Threshing Teeth made to order, on the most reasonable terms.  
Steam Engines and Boilers constantly on hand, and for sale  
cheap. Screw-Cutting Turning Lathes for sale. DEVOE & CO. jcl3

LATEST IMPROVEMENT  
In LADIES' BUCKLES.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS  
State, as well as to Jewelers and dealers in Jewelry, that he has made  
important improvements in BUCKLES, which surpass any and all heretofore  
made. Their simplicity, commodiousness, and beauty render them the  
most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or  
address, FREDERICK REICHEL,  
Manufacturing Jeweler,  
620 Merchant street, San Francisco. sep11

THE  
NEW ENGLAND EWING MACHINE for \$25!

THIS MACHINE stands confessedly at the head of everything now before  
the public. In cheapness, neatness, compactness, durability and beauty,  
it has no rival. It is made with special reference to the wants of a family,  
and any one with the aid of the printed directions can learn to work it  
successfully in a few hours. It will work from leather to the finest cambric  
without the change of needle, tension, or feed. It gives the best satisfaction  
where it is sold, and all who use or examine pronounce it better adapted to  
meet the wants of every family than any other machine now offered to the  
public. Guage and bummer attached.  
Every machine warranted, and kept in order free of charge. This is the  
only cheap machine that will do all kinds of family sewing.

STEWART & SHEAR, General Agents,  
No. 60 Second street. sep11

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of  
Deeds for California Virginia City, N. T. my23

THE FOLLOWING GOODS TO BE FOUND AT  
H. D. PEARCE'S:

Gents' Heavy Gold Cases, different patterns;  
Ladies' Heavy Gold Cases, do do;  
Gold Telescopic Pen and Pencil Case;  
Extension Screw, Heavy Silver, for Gents';  
Extension Screw, Heavy Silver, for Ladies';  
Silver Extension Cases;  
Silver Telescopic Cases;  
Screw, Silver and Ebony Desk Holders;  
Slide Silver and Ebony Desk Holders;  
Reverse Silver and Ebony Desk Holders;  
Pen Holders, Silver and Ebony;  
Pen Holders, Gold and Ebony;  
Pen Holders, Gold and Ivory;  
India Rubber Propelling Pen and Pencil Cases;  
India Rubber Propelling Pencils, short.

All the above goods are made to order and warranted; will be sold  
cheap for cash. There are some thirty different patterns, leaving an opportunity for parties to select and be suited.

A cheaper class of Pens direct from New York, at wholesale only.

Gold Pens constantly on hand. Gold Pens repaired.  
H. D. PEARCE,  
606 Montgomery street, between Clay and Merchant, up stairs.

GREAT REDUCTION  
IN PRICES.

STANFORD BROTHERS,  
121, 123 and 125 California Street,  
KEEP THE LARGEST STOCK OF ALL KINDS

OF  
Lamp Stock,  
And will Sell Cheaper than any House in this State.

LAMPS,  
CHIMNEYS,  
WICKS,  
CAMPENE,  
BURNING FLUID,  
ALCOHOL,  
TURPENTINE,  
COAL OIL,  
KEROSENE OIL,  
COMET ILLUMINATING OIL.

SPERM OIL,  
LARD OIL,  
MACHINERY OIL,  
RAPE SEED OIL,  
CHINA NUT OIL,  
LINSEED OIL, Raw and Boiled,  
POLAR OIL,  
SHARK'S OIL,  
NEATSFOOT OIL,  
TANNER'S OIL,  
&c., &c., &c.

Our customers in particular, and the country trade generally, are requested  
to ascertain our prices before purchasing from traveling agents, as we will  
sell at less rates than they can afford to. ap16m

PHILADELPHIA BREWERY,  
Second street, corner of Folsom, SAN FRANCISCO, CAL.  
Holscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave  
to apprise at the same moment our many friends and patrons that the  
above well known Brewery has been permanently located in our new premises,  
on Second street—the former residence of Capt. Folsom where we shall  
continue to continue in furnishing our numerous patrons with the best article  
of "Beer." We shall strive to perpetuate the good reputation for  
promptitude and the faithful execution of orders as heretofore, and thereby  
increase our custom. Nov9.

FULTON FOUNDRY AND IRON WORKS.

HINCKLEY & CO.,  
MANUFACTURERS OF STEAM ENGINES,  
Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings,  
Mining Pumps, and all kinds of Machinery,  
Amalgamators, Etc. Etc.  
47 & 49 First Street,  
BET. MARKET AND MISSION, SAN FRANCISCO

ALL kinds of Iron and Brass Castings furnished at short notice. Every  
style of finishing to Iron when cast. Repairing to Machinery neatly done  
Pattern Making in its various forms.

D. B. HINCKLEY WM. E. WORTH. WM. A. FIELD

SQUARZA'S PUNCH.  
HOME MANUFACTORY.

WHOLESALE AND RETAIL,  
No. 44 Leldesdorf street, near Sacramento st.  
Branch at 406 Montgomery street. my30

S. ROSENBAUM & CO.—Importers of pure Havana Cigars, Tobacco,  
etc., corner Clay and Battery, 25 and 27 Cedar street, New York.



## Mining and Scientific Press.

W. B. EWER, Editor.

SATURDAY..... NOVEMBER 8, 1862.

The MINING AND SCIENTIFIC PRESS is published at the Federal Building, Room 24, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance. Advertisements at FIFTY CENTS per line. A liberal discount made to quarterly advertisers.

## Engravings, Electrotypes, etc.

WE execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates.

PATRONS will remember that when we execute engravings we will insert them free of charge in the *Mining and Scientific Press*, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## Notice to our Friends and the Public.

The undersigned, your most obedient servant, begs leave to retire from the publication of the far-famed and wide-spread *Mining and Scientific Press*. In bidding adieu to my many friends and patrons, I cannot omit expressing my sincere thanks and obligations for the many favors and kind acts rendered unto me. We leave the tripod with regret, though a responsible one, and full of care and much labor. For three years have we labored and toiled for the advancement and progress for which the *Press* has been called into existence, and we are assured and feel confident that we have not labored in vain. There is, however, much evil to be remedied, and this we leave to our able successor, W. B. EWER, Esq., who will from this date conduct the *Press*, with his usual good judgment, talent and capacity. I would ask the friends of the *Press* to aid him in his efforts, and to perpetuate the advocate of our chief resources.

In a few months, we take our departure for the Atlantic States and Europe, for the purpose of rendering great service to our Pacific States! of which due notice will be given. We sever our connection with the *Press* so far as business matters go, but we shall ever find time to give through its columns matters of importance regarding discoveries, inventions and improvements in every branch of science, arts and industry, especially when we shall be far off on the European Continent. Very respectfully,

JULIUS SILVERSMITH.

San Francisco, Nov. 1st, 1862.

No portion of the globe offers a more inviting field for the publication of such a paper as is contemplated in the prospectus of the *Mining and Scientific Press*, than the state of California. The mineral resources of the Pacific coast have already astonished the world—not less by their unparalleled richness, than in their remarkable variety and extent. Though but little over a single decade has elapsed since California was known simply as an exporter of hides and tallow, still that brief period of time, under the magic influence of the few grains of shining metal accidentally brought to light on the banks of one of her mountain streams, has been sufficient, under the potent direction of Anglo Saxon energy, to establish within her borders the foundation of an empire which is even now felt as a power in the world, and to which the nations are already looking as the great center from whence, at no distant day, must radiate all the chief arterial currents which give life and energy to every department of industry and commerce throughout the earth.

The mineral resources of the Pacific coast, great as they already appear, are yet only in the infancy of their development. Hitherto the attention of our people has been mainly directed to searching for the precious metals. In the early future a heavier and much more important class of mining is to be undertaken. Recent explorations have pretty fully demonstrated the existence, in our valleys and mountains, of unlimited quantities of coal, iron and copper, which are the real foundations of all material wealth, and without which no people can hope to rise to any commanding position in the present progressive age of national advancement.

With such a field before us, and in a community so prolific of publications on almost every conceivable topic, it would indeed be a matter of surprise if not one journal was found devoted to the great leading interest of the State,

and to the mechanical and industrial pursuits which are the necessary adjuncts of every important mining community. Such a paper we have—already established and continued for upwards of three years, under discouraging circumstances it is true, but nevertheless continued as the only special exponent and advocate of an interest, second in prospective importance to none on the globe!

The course of events has thrown this publication, known as the *MINING AND SCIENTIFIC PRESS* into the hands and under the control of the undersigned. Numerous friends and parties having a deep interest, pecuniarily and otherwise, in the development of the mineral resources of our state, and the permanent establishment of an organ which shall be a suitable and worthy exponent of such an enterprise, have induced us to undertake the task of its editorial control. We should shrink from such a responsibility were it not for the fact that we have been promised the aid and assistance of numerous well known writers, of practical and scientific attainments, to assist us in our labors; and it is in confident assurance of such aid that we venture to promise the readers and patrons of the *Press* that this publication shall be made both a welcome and instructive visitor to the miner, the mechanic and the merchant; and that its columns shall ever be replete with information useful and interesting, embracing within its scope all the arts and sciences, and trades and manufactures, in addition to the great leading features of mining and metallurgy.

The miner will find from time to time, carefully digested, every class of information which shall be useful to him in his laborious and precarious calling. We shall arrange, at an early day, for careful and reliable correspondence from all the important mining sections of our State and the Pacific coast generally, not forgetting the great mineral region now looming up in such magnificent proportions all along our eastern mountain border. Particular attention will also be devoted to the general interest and advancement of the mechanic and workingman; and especial effort will be made to render the columns of the *Press* useful, instructive and advantageous to their peculiar interests, by imparting to them early and full knowledge of late and approved discoveries in science and art, and placing in review before them the most useful information already obtained and reduced to practice in their various departments of industry.

In fact, to everything coming within our peculiar field of observation, we shall pay especial attention. The importance of home manufactures and productions, and all efforts of native ingenuity and talent will receive encouraging notice. We shall endeavor to keep our readers properly advised with regard to what the philosopher, the inventor, the artisan, the mechanic and the miner may be doing, each in his peculiar department, whenever such knowledge shall be deemed of general interest or utility. With these purposes well and truly carried out, we feel assured that our efforts will not be without avail in the general accumulation of useful knowledge, and that they will be duly appreciated, and rewarded with a commensurate support from a community so proverbially liberal in the encouragement of all useful undertakings as Californians are universally acknowledged to be.

W. B. EWER.

VERY LIKELY.—British traders and trappers have found diggings on the east side of the Rocky Mountains, a few miles south of the national boundary. They express the hope that our Government will permit the alteration of the line so that those mines shall be in the British possessions. This expression of "hope" is very modest, to say the least; and we presume the recent cordial and humane acts of our British friends in allowing the fitting out, repairing and coal-ing of rebel privateers in their harbors, and at the same time refusing federal war vessels the same privileges, are considered by them as fully warranting the inference that our Government will, in return, oblige them by changing the national boundary so that certain mines now our own may become British property—very likely!

A SAVING.—The California merchants are now paying their debts in legal tenders. By the last steamer one could purchase a draft for \$1,000 by paying \$800 in gold, so that the California trader saved twenty per cent. A handsome profit and easily made.

A NEW style of light wagon now driven by gentlemen on he road in England is called a wagonette.

A VERY PROPER PRECAUTION.—The Grand Jury of Virginia City, N. T., at their late sitting, recommended that their representatives in the next Territorial Legislature should advocate the passage of a law compelling the owners of mining shafts, not in use, to either fill them up or cause them to be properly secured against the accident of persons falling into them. This we conceive to be a very wise and proper precaution, especially in the vicinity of all populous neighborhoods. Scarcely a week occurs that we do not notice the result of severe or fatal accidents which have occurred from this source. As we write, no less than three are noticed in papers lying upon our desk, one of which was fatal. Such legislation might be had as would empower municipal authorities or county supervisors, to take notice and designate such localities as it might be deemed proper to keep guarded against this class of accidents. Heartless and deficient in every human feeling must be any party or parties who, after digging a shaft for the purpose of obtaining "filthy lucre," and after finding themselves disappointed fail or refuse to place some safeguard over the dangers they have created.

THE SAN FRANCISCO QUICKSILVER MINE.—Quite a little excitement was created on Montgomery street a few days since by the exhibition of a very pretty specimen of cinnabar, said to have been taken from a ledge upon the line of the Spring Valley Water Works, at the point where the Company is constructing a reservoir, near the Orphan Asylum. The specimen referred to was quite rich, but a subsequent visit to the locality failed to convince us that the "discovery" is very promising of any other mineral than an excellent article for McAdamising the sandy roads of that vicinity.

A NEW INVENTION.—The success of Ericsson in revolutionising naval warfare by the construction of his Monitors, seems to have given a new direction to Yankee ingenuity.—Having taught the world how to build and fight those naval monsters, our inventors have already entered upon the task of teaching it how to *destroy* them. If they do not succeed we shall think the "Universal Yankee" has forgotten his cunning—or in common parlance is "played out." That such is not the fact we have an earnest in the following paragraph which we clip from an Eastern Exchange:—

A correspondent of the Boston *Traveler*, writing from the United States steamer Kearsarge, says that the Chief Engineer of that vessel, Whittaker, has made an invention designed to destroy iron-plated vessels, and that the officers all believe that he has succeeded. The Captain has ordered him home to report to the Navy Department.

MOUNTAIN HEIGHTS.—The height of Mount Shasta has recently been taken by Professor Whitney, of the California Geological Survey, and ascertained to be 14,440 feet above the level of the sea, or 1,450 feet higher than Mount Hood in Oregon. Mount Shasta is the highest mountain in the United States, the measurement of which has been scientifically ascertained.

During the recent visit of the Professor to Washoe, he also ascertained the height of Mount Davidson 7,827 feet above tide water. Mr Whitney is provided with excellent instruments, and his estimates can be relied upon as correct.

PRONUNCIATION OF "AFTERTAM."—The Baltimore American—good authority—says that the name of the last great battlefield, should be pronounced An-tee tam. This is not only euphonious, but is the pronunciation employed by the inhabitants of that vicinity themselves. It is well that a name which is destined to occupy such an important place in history should be correctly pronounced by the people to whose glory it will redound.

AN account of a tremendous hail-storm in West Lavington and Easterton, England, is published in the London Times. It is said that the hail fell to the astonishing depth of seven feet in less than half an hour. Large fields of unharvested crops were ruined, and many fowls were killed.—The hail was accompanied by rain, and a fearful flood resulted, which filled cellars and greatly increased the damage done.

CAMELS.—A train of six Bactrian camels arrived in Virginia City, N. T., recently. Each animal came through with six hundred pounds on his back.



## The Divisibility of Matter.

Everything which is the object of our senses is composed of matter differently composed or arranged. But in a philosophical sense matter is defined to be an extended, solid, inactive and moveable substance.

Every portion of matter, however minute, must have two surfaces at least, and it follows of course that it is divisible; that is, the upper and lower surfaces may be separated; and though there may be particles of matter too small for us actually to divide, yet this arises from the imperfection of our instruments; they must nevertheless, in their nature, be divisible. A few years since a lady spun a single pound of wool into a thread 168,000 yards long. And Mr. Boyle mentions that two grains and a half of silk were spun into a thread 300 yards in length. If a pound of silver which contains 5,760 grains, and a single grain of gold be melted together, the gold will be equally diffused through the whole silver, inasmuch that if one grain of the mass be dissolved in nitric acid, the gold will fall to the bottom. By this experiment it is evident that a grain may be divided into 5,760 visible parts, 5,751st part of the gold is contained in a single grain of the mass.

Goldbeaters can spread a grain of gold into a leaf containing 50 square inches, and this leaf may be easily divided into 500,000 parts, each of which is visible to the naked eye; and by the use of a microscope, which magnifies the area or surface of a body 100 times, the 100th of each of these is visible: that is the 50 millionth part of a grain of gold will be visible, or a single grain of that metal may be divided into 50 millions visible parts. But the gold which covers the silver wire used in making what is called gold lace, is spread over a much larger surface, yet it preserves, even if examined by a microscope, an uniform appearance. It has been calculated that one grain of gold, under these circumstances, would cover a surface of nearly thirty square yards.

The natural divisions of matter are still more surprising. In odoriferous bodies, such as camphor, musk, and asketida, a wonderful subtlety is perceived; for though they are perpetually filling a considerable space with odoriferous particles, yet these bodies lose but a very small part of their weight in a great length of time.

It is said by those who have examined the subject with the best glasses, and whose accuracy may be relied on, that there are more animals in the melt of a single codfish, than there are men on the whole earth, and that a single grain of sand is larger than four millions of these animals. Now if it be admitted that these little animals are possessed of organized parts, such as heart, stomach, muscles, veins, etc., and that they are possessed of a complete system of circulating fluids similar to what is found in larger animals, we seem to approach to an idea of the infinite divisibility of matter.

It has been calculated, that a particle of the blood of one of these animalculæ is as much smaller than a globe one-tenth of an inch in diameter, as that globe is smaller than the whole earth; nevertheless, if these particles be compared with the particles of light, it is probable they would be found to exceed them in bulk as much as mountains do grains of sand. Many other instances of the extreme divisibility of matter, might be enumerated but these are sufficient to show into what very minute parts matter is capable of being divided.

We shall send copies of the present issue of the "PRESS" to many of the old subscribers to the "CALIFORNIA MINING JOURNAL," formerly published in Grass Valley, Nevada County. We should be pleased to add the names of such of our old friends and former readers of the MINING JOURNAL, as may choose to aid us in our present undertaking. The "MINING JOURNAL AND SCIENTIFIC PRESS" will be published every Saturday morning at \$4 per annum, at No. 24, Federal building, San Francisco, and being the only mining paper in the State we trust the friends of mining enterprise, and all who would keep thoroughly posted with regard to the great leading interest of the State, will send in their orders for the "PRESS." The paper has now become permanently established, having already entered upon the fourth year of its existence.

The *Herald* of this city, of a recent date, chronicles as a notable circumstance, the fact that not a single mining company was incorporated on the day previous.

**TREATING IRON PYRITES.**—An invention has recently been patented by Mr. John Longmaid, of Scotland, for treating iron pyrites and other ores containing copper, silver, and tin, or either of them, and sulphur, which consists in first crushing the ore and passing it through a sieve having about 100 holes in the square inch, and afterwards calcining it and treating with common salt. The invention appears to be a modification of or improvements upon, the inventions of Mr. William Longmaid, patented 1842, 1844, and 1845. According to the new invention the partially calcined pyrites and salt are kept at a low red heat, until decomposition converts them into sulphate of soda and soluble chlorides of the metals. These are washed out and precipitated with iron in the usual manner.

**A NEW APPLICATION OF STEAM.**—A novel experiment is announced as soon to be tried by a steam fishing vessel lately fitted up at Leith. Her trawling gear, which is very heavy, is to be wound up by a capstan driven by steam power, and all living fish thus taken will be put into a well, or salt water aquarium, having a constant circulation of water through it, and thus the fish will be kept in existence until brought to market. This is said to be the first direct application of the steam engine to the purpose of catching fish.

**SILVER BRICKS.**—The citizens of Virginia City, propose to send to the Sanitary Commission, the sum of \$20,000 in silver bricks. The *Enterprise* says: The shipment will be made in solid silver bricks, stamped with an appropriate inscription, and will prove the biggest ad vertisement for Nevada Territory that ingenious brains have yet conceived.—These silver bricks will be curiously examined and commented on by many a man in New York who would forget in fifteen minutes after he heard it, the fact that \$20,000 in gold coin or Treasury notes had been sent from the unknown land of Nevada.

**NORTH PACIFIC REVIEW.**—We have received from Messrs A. Roman & Co., Montgomery Street, the first and second numbers of the North Pacific Review, published in this city, and find them well filled with interesting matter, both original and selected. Each number is illustrated with an engraving, those in the numbers before us being portraits of the late James Donahue and the late Col. Doane—the latter of which is a remarkably striking likeness. The contents are varied to suit all tastes, from the lively, sparkling sketch, to the more sober paper on mining, scientific, or agricultural matters. A well written chapter of notices of new publications, being also one of the features. Judging from the numbers before us, the North Pacific bids fair to take a permanent place, as a first class literary monthly.

**THE CALIFORNIA IRON CLAD.**—The iron clad steamer for the defence of this harbor and coast, is rapidly approaching a completion. She is to be called the "Comanche," and will be a beautiful specimen of naval architecture.—The New-York correspondent of the Marysville Appeal states that when all is finished she will be put together, tried, and if everything works rightly, she will then be taken to pieces and shipped to California. She will differ in several particulars from most of the other Monitors; but all visitors are requested not to make public her important features. Her length is 250 feet, breadth and depth proportionate, and she is to be coated with iron of immense strength, and great thickness; and, in view of the precious national treasures she is to guard, she will carry a terrible armament.

**"OLD VIRGINIA" vs. OPHIR.**—The Territorial *Enterprise* of October 31st, in its "Stock Remarks" says:—

The "Old Virginia" bubble seems to have exploded; at least, there is little or no demand for Virginia. It has been offered to-day at a comparative low figure, with no takers.

THE CONNECTION of the present editor with this paper having been consummated somewhat hastily and unexpediently, he will be under the necessity of begging the indulgence of the patrons of the paper for a delay of one week in the next issue—a delay unavoidable to allow him time to visit his late mountain home and make the necessary arrangements for a permanent removal to this city. The next issue will therefore be made on Saturday, November 15th.

## WASHOE ITEMS.

**THE GOULD AND CURRY MILL.**—The *Enterprise* says that a large number of workmen are engaged upon this great work. A huge ore-house has been erected near the mill, and two or three immense walls are being constructed of cut stone for the protection of a terraced road-way and a large yard. A village of fifteen or twenty neat frame houses has sprung up about the mills, and everything in the neighborhood tells of an industrious and prosperous community. Ore from the Gould and Curry mine is now being crushed at the Hoosier State mill.

**THE DANBY MILL** is a large first class mill, and fast approaching completion. We learn from the *Enterprise* that the mill contains fifteen stamps, twelve iron-bottomed amalgamating tubs, and three large "treating-tubs." The latter are to be placed near the batteries and will be used for mixing the chemicals used with the pulverised ores. The floor of the room containing the batteries and treating-tubs is several feet higher than the amalgamating room, thus greatly facilitating the distribution of the pulp throughout the building and saving much labor in the various departments.

The Company has a large amount of wood piled up near the mill, and will be enabled to "fire up" the moment their mill is completed. Many improvements are being made in the mine. A very rich vein has lately been struck in the lead, which consists of a species of brown, compact earth or decomposed rock, which is literally full of bright, glistening gold. This seam or streak, as far as opened, varies from two inches to a foot in width—the entire lead being about fifteen feet in width.

The eastern extension of this mine is known as the CANEY LEAD, and has been traced for a considerable distance. On the west extension is the GOVERNOR NYE CO., who are now cutting through what is supposed to be the wall-rock of the same lead into a reddish, decomposed earth which yields very fair prospects in gold.

We clip the following items from the Territorial *Enterprise*:—

**BUILDING LOTS.**—Hundreds of building lots have lately been staked off east of town by speculative peg-drivers.—We shouldn't wonder if there was money in those lots.—This city would not stop growing should it try. It's bound to go ahead, and must have some place to spread.

**BREVOORT'S MILLS.**—Col. Brevoort's new mill is rapidly advancing towards completion. A commodious gallery has lately been built, connecting it with the old mill.

**TRENCH'S MILL.**—Additional batteries are being erected at this mill, and there will be a considerable increase in its capacity for amalgamation.

**A NEW MILL.**—The foundation for a very large new mill, to be called the "Rhode Island," is being built on Gold Canon, a short distance below Gold Hill.

**THE NEW SUCCOR MILL.**—This on Gold Canon, near the Succor mine, is in full blast. It is a very little affair, and conveniently arranged.

**GOLD CANON REDUCTION WORKS.**—Some addition has lately been made to the amalgamating machinery of the Gold Canon Reduction Works. This consists in seven new five foot pans with Wakely, or rather improved Wakely, mullers. The new machinery was started yesterday morning.

**THE HOOSIER STATE MILL.**—This new mill works as smoothly and correctly as a well regulated watch, and is one of the neatest and most substantial institutions in the district. It is crushing the Gould & Curry rock at present.

**TAR SPRING.**—The Territorial *Enterprise* mentions the discovery of a tar spring—petroleum probably—which is located between Mud and Pyramid lakes. This spring emits a thick, bituminous fluid; the discharge being quite hot where it bubbles out of the earth. According to the *Enterprise*, the Indians frequent the tar spring for the purpose of pitching their baskets and willow water vessels.

**VIRGINIA CITY POTTERY.**—The Territorial *Enterprise* of the 31st ult. says:—"A kiln of fine glazed ware is ready for drawing at this establishment. The proprietors find no difficulty in disposing of their ware."



## The next Mining "Sensation."

Late Victoria papers, received at this city, are filled with glowing accounts of extraordinary gold yields from the placers of Fraser river, Cariboo, Similkameen, etc. The *Colonist* published in that city says that the late arrivals of gold from those places "puts to blush the croakers who have come here and left," and asserts in the very face of the ragged and starving thousands that are fleeing from those localities that "there will be good diggings there for the next ten or twenty years; and that it will take five years to get them opened." Still, as if doubting the possibility of again inducing a crowd of adventurers to visit and leave their money, if not their bones, in those same localities, that paper has the presumption to announce "new and important discoveries," still further north, beyond the Fraser and over the divide, along the waters of Peace river, which find their outlet in the Arctic Ocean! "There," says the *Colonist*, "we are met by a new El Dorado, where the miner can render muddy by his industry, waters that fall into the Arctic Ocean." Further on, in the same article, we find the following significant paragraph:—

"We really claim to have a greater extent of gold-bearing country than any other country in the world. [!] \* \* \* With our small population we are doing wonders in discovering it. [No doubt.] What we want from abroad are capitalists and capital, laborers willing to labor—to put up with the "blues" and hardships of a rugged country—rugged above the average. We want for next year, mules, pack-horses, freight-wagons, stage-coaches, steamboats, express-men, mail-carriers in all directions, coasters, seamen, and merchants. The more we get of these classes—not forgetting the farmer—the better. [No doubt of it.] Here is the field for speculation, enterprise. We assert it, we know it, are sure of it, have not a doubt about it, that our Pacific Territory is a rich one in gold." [!]

Other columns of the *Colonist* are filled with details of "rich strikes," and "extraordinary yields," from which the uninitiated might be led to suppose all one had to do was to go to the mines and scrape up gold by the handful! Who does not see in these paragraphs the most unmistakable evidence of the ground work of another mining "sensation" for the coming season?

Whatever may be the ultimate value of British Columbia as a mining region, certain it is that, notwithstanding the vast pretensions of the *Colonist*, and other journals in like interest, (some of which may be found in this state,) we have, as yet, no reliable evidence upon which to base the propriety of any extensive mining emigration to that quarter. Still as it seems to be a *sine qua non* with California, that she must have her periodical mining excitements, we trust, if such things are to be, the speculators will hereafter select for their field of operations, some locality within the confines of our own state, so that those who are bent upon going upon a fool's errand may be kept within easy reach of their friends, and be induced to spend their money for the benefit of their own countrymen.

It is now upwards of four years since a base and nefarious set of swindlers, made up of steamboat and ship owners, and land pirates of every specie and class that can thrive by such excitements have been annually enticing thousands upon thousands of miners from California, and people from other parts of the world to try their fortunes among the placers of British Columbia. After each year of failure they have been told that the new El Dorado was certainly to be found only a little farther beyond the point visited the previous year—that they were sure to strike it, if they persevered, and return, every one with a "pile," if they would "only go a little farther North or East this year!"

Each fall the roads from these regions have been thronged with these same thousands, returning from their explorations, disgusted and discouraged, and, in a majority of cases with nothing but rags to cover their nakedness and scarcely a dollar to provide that sustenance which is doled out to them by these same speculators, at enormous prices. Hundreds we are told, have put a violent end to their existence, or sat themselves down to die after their last possible effort to escape from this modern Golgotha. These are facts—not fancies—as may be almost daily brought to the knowledge of every person residing in any of the principal commercial or mining centres of the State, who will take the least pains to enquire into them. The present is no exception to the rule, but has been quite as disastrous as any season which preceded it. And yet the journal already alluded to, as

published in the chief city of that region, has the effrontery to jeer at the great array of sufferers hastening home from that inhospitable country, ere the rigors of a northern winter deprive them of the last hope of ever again reaching the bounds of civilization—it denounces them as 'croakers', etc.!

The press throughout this state has, year after year, given timely cautions against these delusions, and pointed to the well attested facts that such reports are all got up for speculative purposes, having, it may be, some few data from which to work; but showing that they were, in the main, baseless as the fabric of a dream. We trust that now, at least, the days of humbuggery and excitement, in this peculiar channel, at least, have gone by and that our miners will hereafter conclude to let well enough alone, and adhere to the good old adage that "a bird in the hand is worth two in the bush." Let them pay no farther attention to the oft repeated tale of rich and richer mines far and still farther north. Let them endeavor to settle down into the reasonable conclusion that the extraordinary stories of rich diggings now coming in from the distant Peace river mountains, are but repetitions of the "same old story," and resolve to settle down quietly, even if they do not earn more than \$2½ or \$3 per day, since, in the end, they will even at that, with economy and industry, amass a competence for old age.

**HENNESSY PASS ROAD.**—A new line of stages has recently been put on between Grass Valley and Virginia City, connecting with the California Co's coaches at the former place. The first trip over this road was made in 17 hours 40 minutes, traveling time. Travelers will find this decidedly the best route of travel to Virginia City. Arrangements have been made by the Stage Company and the people living along the route to keep the road open through the winter, and in good condition for teaming. This can easily be done, if entered upon with a will, and would be of vast benefit to both California and Nevada Territory.

**A WISE MOVE.**—The wine growers of Anaheim have joined in an association called the United Wine growers of Anaheim, the purpose of which is to establish a depot in San Francisco, where their wine can be obtained in abundance and purity.

**RECENT PATENTS.**—Granted to CALIFORNIA INVENTORS through the Pacific Agency, J. SIEVERS SMITH, Solicitor:

**E. E. MATTESON, Nevada:** *Hydraulic Derrick.* This invention has been illustrated in this journal, and has obtained great celebrity throughout the State.

**ELANDER HEATH, San Francisco,** *Spiral Spice and Sage Mill.* See "Mining and Scientific Press," June 9th, 1862, Vol. V., No. XIII.

**G. F. DEETKEN, formerly of Nevada:** *Apparatus for separating Gold from Pyrites.* This is one of the most useful inventions of the day. Mr. Deetken has successfully worked sulphurets for a number of years in Nevada county, professes to have obtained greater results than others engaged in the same occupation. Mr. D. has recently established himself in this County, on the San Bruno Road, near the Islais Creek, where he has erected chemical and metallurgical works.

## Stock Quotations.

[CORRECTED WEEKLY FOR THE "PRESS."]

	SHARES	SHARES PER FOOT.	VALUE PER SHARE	BIDS.
Ophir .....	16,800	12	\$300	\$2150
Gould & Curry .....	4,800	4	500	2000
Central .....	1,800	12	300	1100
California .....	3,600	12	300	1500
Wide West .....	8,000	4	60	285
Sierra Nevada .....	5,600	4	300	80
Daney .....	2,800	2	500	190
Chollar .....	3,600	1 to 10 in.	250	275
Potosi .....	4,400	1	400	40
Lucerne .....	10,000	1	500	10
North Potosi .....	3,600	1	300	15
St. Louis .....	5,000	1	100	—
Real Del Monte .....	2,400	2	250	—
Mount Davidson .....	10,000	3	200	—
Rogers .....	2,000	1	250	28

**THE GERMAN BAR LEDGE.**—This famous ledge which was taken up during the great excitement of 1851-2 and of the yield of which most astonishing reports were circulated, seems to have quite passed out of mind of late years, but has now been again brought before the public—as rich as ever. The Nevada Democrat gives the following in relation to it:—

**A RICH STRIKE.**—We learn that a rich quartz strike has lately been made in a ledge on the north side of the Middle Yuba near German Bar. The ledge is known as the "Copper Hill Lead," and is owned principally by Mr. George Fellows, who has been working it most of the time since 1851. It was taken up during the quartz excitement of that year by a party of miners, of which Mr. Fellows was one, and the company, fortunately striking a rich pocket, took out from \$150,000 to 160,000. Having worked out the pocket, it was found that the rock in other places would not pay, and the partners, one after another, sold out or threw up their interests and returned to the Eastern States. Mr. Fellows, however, stuck by the ledge, and has been working it more or less ever since. He erected a mill some years ago, known as the "German Bar Mill," which was carried off by the flood of last winter. The rock, however, hardly paid for the expense of working, but he continued on, in hopes of striking another pocket, and his perseverance has at length been rewarded.—The workmen came upon another rich place a month or six weeks ago, and have since been taking out gold by the wholesale. We cannot learn how much has been taken out, as Mr Fellows keeps these matters to himself. He went below at the State Fair with \$10,000, which had been taken out within a week or two previous; since then the lead has been getting richer, and up to the present time there are no indications of the pockets giving out. One gentleman, who visited the ledge a few days ago, and who has some means of judging, informs us they must have taken out nearly \$100,000 in the past month. Others place the amount at from \$50,000 to \$100,000.

**A NEW CITY.**—It appears from the subjoined letter from the Morning Call of Monday, that a new city has recently been laid out on the west bank of the San Joaquin, at the point of its confluence with the Sacramento. It seems that the site possesses advantages, which will doubtless soon become known. It has already arrived at sufficient importance to call for the stopping there of the Sacramento Steamers for way freight and passengers. We give the letter:—

COLLINGSVILLE, Oct. 25, 1862.

**EDITORS MORNING CALL:**—You will receive this from our new city at the mouth of the Sacramento and San Joaquin rivers twenty miles (about equal distances) from Suisun and Rio Vista, and opposite the towns of New York and Antioch. We have a fine wharf and store-house now built, and a good hotel. We are making a fine road from the wharf. Parties are about putting on a ferry boat to run to Antioch. The distance then will be only 35 miles to San Francisco, saving a distance of over one hundred miles, going by land and driving stock. A number of gentlemen from your city are now laying out our place in town lots, and we hope soon to have a post office, application having been made. The Sacramento steamers stop every other day—Saturday, Monday, Wednesday and Friday, going up; Tuesday, Thursday and Saturday, coming down. If you or any of your friends would like a few days' gunning, there is no other place in this State where game is so plenty. One of our gunners this week killed 164 geese in three shots. Our ponds are full of mallard and other ducks; our tules full of winter snipe and larks. X. Y. Z.

**PREVENTING INCRUSTATION OF STEAM-BOILERS.**—NOVEL APPLICATION OF PEAT.—The advantage of employing pure water in steam-boilers is too well known to require comment; and the processes by which it has been sought to remove impurities have been very numerous. Mr. John Cameron, of the Hematite Iron-works, Hindpool, now proposes an extremely simple method of causing vegetable acids to act upon the impurities which have usually to be contended with. He forms a tank with two divisions, that may hold from 50,000 to 60,000 gallons of water; one division being on a lower level than the other, so that the contents of the upper division may be emptied into the lower. The upper tank is filled with water, and about 30 tons of peat is added to each 25,000 gallons of water; the peat is put in part dry and part wet, and is occasionally stirred, that every part of the water may be acted upon. It is then left at rest, and the organic compounds (humic, ulmic, humic acid, ulmic acid, crenic acid, and apocrenic acid) existing in the peat precipitate the earthy matters contained. The purified water may then be drawn off into the lower tank, and the upper tank refilled.—*London Mining Journal.*

**BATTLES.**—During the Revolutionary war, there were fought thirty-six battles; during the war of 1812, eighteen; during the Mexican war, twelve; and in the present war, thus far, fifty-three.



**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA  
connecting via the Panama Railroad with the steamers of the Atlantic  
and Pacific Steamship Company at Aspinwall.

### FOR PANAMA,

The following Steamships will be dispatched in the month of 1862

1st—UNCLE SAM, Captain R. H. Horner.  
11—GOLDEN AGE, F. R. Baby, Commander.  
21st—SONORA, ————— Commander.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York

For freight or passage, apply to

**FORBES & BABCOCK, Agents,**

Je4

Corner of Sacramento and Leidesdorff sts.

### RE-OPENING OF

## THE NICARAGUA ROUTE!

**People's Line,  
CONNECTING CALIFORNIA and NEW YORK.**

**700 Miles shorter than any other route!!**

**EXPECTED TO MAKE THE TRIP THROUGH  
WITHIN 21 DAYS.**

The fast and favorite *Double Engine Steamship*

**MOSES TAYLOR, 1,500 tons,**

**E. HOWES** ..... Commander.

Will be dispatched for

**SAN JUAN DEL SUR,**

From Mission street Wharf.

Punctually at 9 o'clock A. M., of

**MONDAY, ----- DECEMBER 1st.**

Connecting with the splendid Steamship

**AMERICA,**

2,000 Tons.....**JEFF. MAURY, Commander.**

**THE PEOPLE'S LINE**

Has been established on this

**Shortest, safest and Healthiest Route,**

To meet the universal demand for an

**OPPOSITION,**

And every Californian should give it a preference for the public good, as well as his own private advantage, which will be secured by

**Reduced Fare, Good Accommodations, and Quick Trips.**

This line is intended to be a permanency, and is not put on for the purpose of being bought or driven off. Speed, safety and the utmost comfort of passengers are the main objects. To secure these no merchandise freight (other than specie) will be taken. The **MOSES TAYLOR** is built with **Water-Tight Compartments**, and is unequalled for safety as well as speed.

For information or passage apply to

**ROSS, DEMISTER & CO., Agents,**  
425 and 427 Battery street.

### LABOR-SAVING

## Rock Drilling Machines.

**TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRY-**  
men. The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

**HAND, HORSE, AND**

## STEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way.

A **FOUR-HORSE POWER MACHINE**, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process.

Address orders to **WM. W. DUNN,**  
oc7-3m] Fremont street, bet. Market and Mission, San Francisco.

**F. G. BEPLER,**

## PRACTICAL COPPERSMITH,

**No. 118 (Old No. 22) Bush street,**

Between Sansome and Battery,

SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work.

All orders from the country promptly attended to.

Je8

## A. ROMAN & CO.

WHOLESALE AND RETAIL

## BOOK ESTABLISHMENT.

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals. Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Piggot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Philips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell.

Liver Ores and Silver Mines, by Pro. Blake.

Cro's Dictionary of Arts, Manufactures and Mines.

Weisbach's Mechanics of Machinery and Engineering.

Naville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

Together with many other works in this & similar lines

Books imported to order on short notice.

## A. ROMAN & CO.,

417 & 419 Montgomery Street.

## Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS, OR manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentee.)  
sept-13m San Francisco.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen

Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an

**JUL. SILVERSMITH, Federal Building, Room 23.**

## RASCHE & SONS,

131 Montgomery street., bet. Bush and Sutter,  
SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

## PIANOS, SHEET MUSIC

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

**A. A. GALE & CO., New York;**

**T. GILBERT, Boston;**

**C. MEYER, Philadelphia.**

Whose Pianos they have always on hand, for sale and to rent.

**PIANOS FOR RENT.**

*New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the trade and professors of music.*

au14

## V. SQUARZA'S PUNCH FACTORY.

WE PRESENT HERewith THE PORTRAIT AND TRADE MARK OF the gentleman who heads this article. Mr. Squarza is favorably known in this State for his Anti-Divorce Liqueur and similar productions, as manufactured by him. We may mention that Mr. Squarza is an adept in the chemic-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,	Anisette,
Cognac do.	Whisky do.	Kirschwasser,
Arac do.	Kirschwasser do.	Brandy Cocktail,
Anti-Divorce Punch,	Cocoa do.	Anti-Dyspepsia Bitters,
Coffee do.	—	Appetizer,
Tea do.	Morning Comfort,	Ladies' Tears.
Pineapple do.	Kuennel,	

And CHAMPAGNES of all brands.

## THE EYES! THE EYES!! THE EYES!!!

**DR. E. H. PARDEE,**

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hacknied course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone;" "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonable.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.

**JULIUS SILVERSMITH,**

## COMMISSIONER FOR NEVADA TERRITORY.

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington sts., Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE WHO HAVE BUSINESS relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

## FREDERICK KESMODEL, Cutler and Surgical Instrument Maker

817 KEARNY STREET,

Between Jackson and Washington streets,  
SAN FRANCISCO.

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are all uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.

**FREDERICK KESMODEL,**  
Inventor and Patentee.

ap3 1f

**W. T. & J. GARRATT,**

CITY

## BRASS & BELL FOUNDERS,

Cor. First & Market sts., opp. Oriental Hotel,

SAN FRANCISCO.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE AND LIFT PUMPS,** Church and Steamboat Belts, Tappan and Hand Belts and Gongs, Hose and all other joints, Gauge cocks, Oil Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of all sizes. Manufacturers of "Garratt's Patent Improved Journal Metal."



## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual lost was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

## For parting silver from gold when gold

is below 300-1000ths. fine.....3cts per oz.  
 " from 300-1000ths. to 750-1000ths fine.7cts " "  
 " " 750-1000ths to 950-1000ths "14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
 301 " 500, 7cts, " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

In regard to the deposits of *Washoe silver*, the rule will hereafter be, that the value of gold contained in the same will be paid in gold coin, and the value of silver in silver coin. The value of the silver will be calculated at \$1.21 per standard oz., and is exempted from the coinage charge, unless deposited for silver dollars, in which case a charge of  $\frac{1}{2}$  per cent. will be made additional. Bullion of the above denomination will be entered on the gold and silver register, as most congruous with the physical aspects of the material, but in the warrant it must be marked that so much is to be paid in gold and so much in silver, according to the contents reported by the assayer. The above rules, and charges were promulgated on July 10th, by Superintendent Robert J. Stevens.

U. S. BRANCH MINT, Nov. 6th, 1861.

On and after the 15th inst., a charge varying in accordance and the character of the deposit, from half a cent to three cents per oz., gross, in addition to the general rates, and be imposed on all bullion deposited for coinage or manufacture, which will require toughening or extra refining to render it suitable for mint purposes.

ROBT. J. STEVENS, Superintendent.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, WHILE MR. BREWER was engaged in the Sumner street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

## COMET ILLUMINATING OIL!

Manufactured expressly for Stanford Bros.

THIS POPULAR

## BRAND of KEROSENE

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

Best Family Oil in the Market

STANFORD BROTHERS,

au14

Nos. 121, 123 and 125 California street.

## 50 lbs. MARINE AND FIRE-PROOF PAINT

MANUFACTURED BY THE PACIFIC METALLURGICAL WORKS, IN THIS city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 lbs. Fire-Proof Paint,

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linsseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white lead; mix with Linsseed oil. Put it thick on a tin Roof, as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FORTUNE, Superintendent.

WORKS, North Beach; Office, 318 California st.,  
 SAN FRANCISCO

## WRIGHT'S PICKS.



JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 611 Market street,  
 Opposite Battery, San Francisco.

## LEWIS COFFEY &amp; RISDON'S

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work or the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner of Bush and Market Streets.  
 Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

A Circular containing further information, and a synopsis of the Patent Laws of various countries, will be furnished on application to J. Silversmith, Government House, San Francisco.

Miners, Inventors, Agriculturalists, Capitalist and Mechanics, will find it to their advantage to subscribe for the MINING AND SCIENTIFIC PRESS—being the only journal of that class published upon this continent. Issued every Saturday at four dollars per annum.

Address, J. SILVERSMITH,  
 SAN FRANCISCO.

## MUSIC! MUSIC!! MUSIC!!!

A. KOKLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise.

Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c., &c.

Lighte's New Patent Insulated Iron Frame is put into all of  
 Lighte & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,  
 FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

A. KOKLER, Agent.

## CORN AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skillful and scientific Professors of Philadelphia, and having made this branch of surgical science my speciality for nine years, enables me to operate skillfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can commend you with confidence to the citizens of San Francisco, as one of the most skillful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertions in the new and growing city of the Pacific.

We subscribe ourselves yours,

Rev W Stanton, L.L.D.,  
 Richard A Vaux,  
 Dr Straud, M.D.,  
 Dr Loomis, M.D.,  
 Cleopole Stevens, M.D.,  
 Samuel Fancett, M.D.,  
 Walter C Foster, M.D.,

S W Howard, Att'y at Law,  
 Pierce Butler,  
 Henry B Linton, M.D.,  
 Wm L Howard, M.D.,  
 Philippe Lidy, M.D.,  
 Myers Davis, M.D.,  
 W M Thompson, M.D. and others.

No. 718 Catharine street—this is to certify that Dr. Kennedy has removed corns and bunions off my feet, which have annoyed me for years. He also removed a cancer from my middle finger, which I had no use of for a period of six months. I cordially commend him to the suffering humanity of Philadelphia as a skillful surgeon.

MRS. J. W. HAMMOND.

## REFERENCES:

John Corbett, M.D.,  
 Capt McClure,  
 Wm H Mills, Jr.,  
 Rev Walter W Stanton, L.L.D.,  
 Samuel W Howard, Att'y at Law,  
 Cleopole Stevens, Pharmacistist,

Mrs Smith, Greene street,  
 Mrs W L Howard,  
 Walter O Foster, Com Mer, Third st,  
 Myers Davis, Market st, above Fifth,  
 Major Comstock,  
 Mrs W. Patridge, Walnut street.

From Dr. W. L. Stevens: Dr. Kennedy has operated upon my feet, and has effectually cured me of some torturing pests that I have been annoyed with for years.

From the Rev. Walter M. Thompson: This is to certify that while sojourning in Philadelphia, Dr. Kennedy has operated on three of my family to my entire satisfaction.

From the Hon. Wm. M. Thorn, ex-member of the Ohio Legislature: This is to certify that I called on Dr. Kennedy to operate on my feet: He displayed great skill as a surgeon, and I am satisfied that he has effectually cured me of those torturing pests which have annoyed me for many years.

From Geo. F. Omerly, 637 Arch street: This is to certify that I called on Dr. Kennedy. He has operated on my feet to my entire satisfaction. au21



# Mining and Scientific Press.

A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI. SAN FRANCISCO, SATURDAY, NOVEMBER 29, 1862. NO. 5.

MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR: VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefitted by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects, Millwrights and Farmers!

This Journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

### Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

## W. B. EWER, Publisher,

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent Right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

## ARTS & SCIENCES



## SCIENTIFIC CORRESPONDENCE.

The following ably written article is taken from the *Washington Times*. T. B. Truckee is evidently well versed in geology and metallurgy, hence his interesting recital:

MR. EDITOR—Dear Sir: Will you kindly admit a few remarks upon the subject of minerals and metals, into your valuable journal, which may not be unacceptable to your numerous readers?

The greatest matter of importance to this Territory, is the mineral wealth which lies buried in all its mountains, and the vast varieties in which it is found. It may be safely stated that this country possesses, in large measures, all the valuable known minerals; and, in a few years, this will become one of the most, if not the most, important region of the commercial world.

The question, in fact, is not, With what mineral does this country abound? but, really, What are the minerals which are not found in the vast mountains which form the eastern escarpment of the Sierra Nevada?

We find gold, silver, copper, iron, zinc, mercury, antimony, bismuth, lead, arsenic, platinum, cobalt, coal, &c., in every variety of matrices; all of which will, in due course of time, be developed and worked. Tin ore may be said to be the only valuable mineral not yet found, but it may, nevertheless, be present as black tin, near some of the lodes where copper has been obtained; although most of the copper ores, yet discovered, are associated with gold and silver.

The metal to which the attention of the present population of this country is mostly directed is silver; and the many and varied forms in which this mineral is to be found, and the great variety of its associates is a matter of vast importance to the commercial community of this part of the new world.

The mineral of silver has no less than twenty-six known varieties, viz: 1st, Native massive silver; 2nd native needle silver; 3d, auriferous native silver; 4th, antimonial silver; 5th, arsenical-antimonial silver; 6th, telluric silver; 7th, sulphuret of silver; 8th, black sulphuret of silver; 9th, flexible sulphuret of silver; 10th and 11th, dark and light red silver blend; 12th compact silver glance, or vitrious silver; 13th, earthy silver glance; 14th, rhomboidal silver glance; 15th, white silver; 16th, gray carbonate of silver; 17th, bismuthic silver; 18th, malzprite; 19th, stromeyerite; 20th, seleniuret of silver; 21st, eukarite; 22d, iodide of silver; 23d, carbonite of silver; 24th muriate of silver; 25th, chloride of silver, and 26th, butter-milk silver.

These varieties have their respective associated minerals, which may be placed as follows: Alumina, antimony, arsenic, barytes, calcium, cinnabar, cobalt, copper, gold, iron lead, mica, selenium, silica, sulphur, and tellurium.

Most of the silver ores of this country are very strongly impregnated with sulphur and arsenic, which substances render the obtaining the precious metal both difficult and precarious.

It has been the study of some years to endeavor to form some general principle by which the ores of the precious metals could be worked; but to the present time it has proved wholly impracticable, as the features of every new mine differ, in some respect, from its neighboring deposit; and, therefore, little quack medicines, which are said to cure

all disorders, and are found to be failures in most, so in this instance, except the matrix be treated according to its constitution, a good and perfect result cannot be obtained. In order to procure the finer and more precious metals, it requires that the impure qualities of the matrix should be either neutralized or expelled; and, in fact, the material treated according to its analyzed constitution, without which it is quite impossible but that a very serious loss must always take place. This is tacitly acknowledged in all the works for the reduction of ores of this country, by the fact that every mill reserves its tailings for some future working.

It would occupy too much of your valuable space to, at present, enter further into this subject, but I will, with your polite permission, do so on some future occasion.

I am, Dear Sir,

Yours, faithfully, J. B. TRUCKEE.

MAKING ICE BY MACHINERY.—The following is an account given in the *World* of a patent improved ice-making machine, manufactured by D. Siebe, Lambeth, London. This machine is in actual use in India and Peru, where it produces ice at the rate at from two and a half to six dollars per ton.—The principle upon which the machine is constructed is an application of the well-known natural law, that by evaporating fluids the caloric contained therein passes off with the vapor, thereby reducing the temperature of the evaporating body. In this process a volatile fluid steam is used as an evaporating agent; a powerful pump forms a vacuum, and in its efforts to do so assists the evaporation at a low temperature on the one hand, and by pressure, with the assistance of water at an ordinary temperature, reduces the vapor again to fluid on the other hand, thereby using and re-using the same volatile fluid without loss. No chemicals of any kind are used, unless ether, benzola, &c., are chemicals. To talk about making ice in the United States may at first sight seem absurd. I am not so sure that it is so in all localities and under every condition of things. But there is a purpose to which this ice-making machinery is applied which may be deserving of attention in the United States.—It is proposed to cool hospitals by this machinery on the converse principle by which buildings are warmed. It has been proved by experiment that this is practicable, the inside temperature of a chamber having been reduced to within six degrees of the freezing point, while the thermometer outside ranged at 90° Fahrenheit. In the progress of the war something of this sort may be very desirable. The machinery for making a ton of ice at a time might be carried on a large wagon.

IRON FORMED BY ANIMALCULES.—The *Journal de l'Instruction Publique* contains a curious article by M. Oscar de Watterville, in which he announces the fact, not generally known, that in the lakes of Sweden there are vast layers or banks of iron, exclusively built by animalcules, not unlike those that have laid the foundations of large islands in the ocean, by silently and for ages cementing matter with matter, so as to create those beautiful forms known as madre-pore, mille-pore, corals, &c. The iron thus found is called in Sweden "lake ore," distinguished, according to its form, into gunpowder, pearl, money, or cake ore. These iron banks are from 10 to 200 metres in length, from 5 to 15 broad, and from a fourth to three-fourths of a metre and more in thickness. In winter the Swedish peasant, who has but little to do in that season, makes holes in the ice of a lake, and with a long pole probes the bottom, until he has found an iron bank. An iron sieve is then let down, and with a sort of ladle, conveniently fashioned for the purpose, the loose ore is shoveled into the sieve, which is then hoisted up again. The ore thus extracted is of course mixed with a quantity of sand and other extraneous matter, which is got rid of by washing it in a cradle like that used by gold diggers. A man may get out a ton of iron ore a day by this process.



## IVORY.

The immense demand for elephants' teeth has of late years increased its supply from all parts of Africa. At the end of the last century the annual average importation into England was only 192,600 lbs.; in 1827 it reached 364,784 lbs., or 6,080 tusks, which would require the death of at least 3,040 male elephants. It is probable that the slaughter is much greater, for the teeth of the female elephants are very small, and Burchell tells us, in his African travels, that he met with some elephant hunters who had shot twelve huge fellows, which, however, altogether produced no more than two hundred pounds of ivory. To produce 1,000,000 lbs. of ivory, the present annual English import, we should require (estimating each tusk at 60 lbs.) the life of 8,333 male elephants. It is said that 4,000 tuskers suffer death every year to supply the United States with combs, knife-handles, billiard balls, etc.

A tusk weighing 70 lbs. and upward is considered by dealers as first-class. Cuvier formed a table of the most remarkable tusks of which any account had been given. The largest on record was one which was sold at Amsterdam, which weighed three hundred and fifty pounds; in the late sales in London the largest of the "Bombay and Zanzibar" was 122 lbs.; of "Angola and Lisbon" 69 lbs.; of "Cape of Good Hope and Natal" 106 lbs.; of "Cape Coast Castle, Lagos," etc., 114 lbs.; of "Gaboon" 91 lbs.; "Egyptian" 114.—But it must not be inferred from this that large tusks are now rare. On the contrary, it is probable that more long and heavy teeth are now brought to market than in any previous century. A short time ago Julius Pratt & Co. cut up at their establishment at Meriden, Ct., a tusk that was nine and a half feet long, eight inches in diameter, and which weighed nearly eight hundred lbs. The same firm in 1851 sent to the "World's Fair," London, the widest, finest, and largest piece of ivory ever sawed out. By wonderful machinery, invented in their own factory, they sawed out (and the process of sawing did the work of polishing at the same time,) a strip of ivory forty-one feet long and twelve inches wide. It took the precedence of all the specimens sent in by England, France, or Germany, and received rewarding attention from the Commission.

It may be asked what can be done with such an immense piece of ivory? We reply that the time has come when this beautiful material can be used for purposes of veneering, and we shall soon doubtless see tables, bureaux, writing-desks, and other members of the furniture family rendered as resplendent as the throne of Solomon. We believe that it is now contemplated by Steinway & Sons to build a piano whose keys shall not be the only portion from the teeth of the African elephant, but an instrument whose whole surface shall be of burnished virgin ivory. One thing is certain, that any piano-forte manufacturer who should first attempt this will make a sensation by the novelty of the affair, and will doubtless be well rewarded for his labor.

The most costly tusks, or portions of the tusks, are those which are used for billiard balls. What are termed "cut points" of just the right size for billiard-balls, from  $2\frac{3}{8}$  to  $3\frac{1}{8}$  inches in diameter, brought the highest price (£53) per cut of any ivory offered in the London market at the late sales. Billiard-ball making has of late become a very important item of manufacture in this country.

The teeth from the West coast, with the exception of "Gaboon," are less elastic, and less capable of bleaching, than those that come from other portions of Africa. The West coast tusks are much used for knife-handles. Since the French have possessed Algeria, France receives a considerable portion of ivory from Central Africa by the large caravans that travel from Timbuctoo northward.

Ivory is also furnished by the walrus or sea-horse, and commands a price equal to the best qualities of elephant ivory. It is, however, too hard and non-elastic for many purposes, and has the disadvantage of being too small to cut up profitably.

**SILK FOR THE MILLION.**—Some very encouraging experiments in the culture of a new kind of silk, called ailanthe, have been made in France under the patronage of the Emperor. The worm is an importation from China, where its silk is in common use among the people for every day wear. The food of the worm is the leaves of the ailanthe, a hardy tree that flourishes equally well in the temperate or torrid zone, and grows on soil worth little for any other purpose. The silk is not so fine nor glossy as that produced by the mulberry worm, but it is strong and easily produced, takes most dyes well, and is emphatically a silk for the people. Thus far the silk derived from the ailanthe worms has been what is known as corded silk—a material in great demand among manufacturers—but specimens of Chinese manufacture show that they must possess some method of reeling off the cocoons. Says an English paper, in speaking of this new kind of silk, "To Henry IV. the country owes the silk of the rich; to Napoleon III., courteous history will record, she owes the silk of the people. In 1599, a great king wished to patronize the introduction of a silk-worm, but a great minister, Sully, was hostile to the enterprise; at the present epoch it is again a great sovereign who patronizes the introduction of a new silkworm, but it is impossible that a minister could now be found who would repeat the error committed by Sully."

**EFFECT OF THE AMERICAN WAR UPON ENGLAND.**—The loss which England already sustains by the blockade of the secession ports can hardly be stated at less than a quarter of a million per week, including the cessation of employment and wages for the operatives, and the waste and loss of interest on capital sustained by the employers, in the staple manufacture of Lancashire. The localization of the interrupted industry adds terrible weight to the severity of the blow.

Two hundred thousand hands suddenly thrown out of work, in a population of twenty millions, might easily be fed and kept from severe suffering by the care and assistance of their immediate neighbors. But that number deprived of their means of subsistence, in the midst of a population of some two millions, all impoverished by the same calamity, and most of them actually dependent on the wages of those who are now unemployed, are in danger of actual starvation.

Some idea of the state of affairs in the manufacturing districts may be obtained from the report of a deputation sent from Birmingham into the cotton districts to make inquiries. In Manchester, the subscriptions to the general fund amount to £25,000, and £10,000 has been given to the Provident Society; while Liverpool, which merely imports cotton, and where only 1,000 or 2,000 cotton porters are dependent for a living by removing it from the ships into the warehouses, has already contributed £32,000. Exceptional cases are, however, mentioned by the Birmingham deputation. A large mill owner is stated to have lent his work-people £3,000 to "tide over the evil hour;" and another has spent £1,000 in unproductive labor. The Birmingham deputation calculate that the diminution of wages in the distressed districts during the coming winter months will be at least £150,000 a week, and the same authorities state that, when the distress has reached its height, it will require advances at the rate of £100,000 (500,000) a week to keep the population from starving.

**COPPERING THEM.**—The Monitors, now in course of construction, have one weak point, notwithstanding the universal faith in their invulnerability. Water will do that which hostile shot cannot—it will slowly but surely eat its way through the iron plates which compose the hull so as to fatally weaken or destroy them ultimately. A method of copper coating these plates has been devised, however, which seems to afford effectual protection from corrosion. Copper is fused and heated to 1,000 degrees, when the iron plates which are to be coated are plunged into it and kept there until they are nearly at a white heat. Then partial fusion between the two metals takes place, and the plates when withdrawn are found to be much more effectually coated than is possible by the galvanic process which has hitherto been employed.

**A POWERFUL RAM.**—The rebel ram, Fingal, building at Savannah, will soon be completed, and when her iron-plating is finished she will be fully equal in point of strength to the Merrimack. She was an English iron steamer, and ran the blockade early last spring, and on this account is much stronger than ordinary vessels, being iron-braced in every part. She was built in Greenock, in England. The rebels have cut this vessel down, razeing her some eight feet, and widening her by the introduction of eight feet of white oak on either side, bolted on, and the iron plating is bolted and riveted to this. The whole vessel is roofed over with iron, on the same principle as that evident in the construction of the Merrimack. She is provided with eight hundred horsepower, double oscillating engines, and will be a troublesome customer, if she is ever allowed to get out from Savannah.

**WHAT IRON-CLAD SHIPS HAVE DONE.**—The Liverpool Post says:—In a short time, the war continuing, America will have the largest and most effective navy in the world. The Government at Washington does not yet feel quite secure against the chance of European interference. Possibly the alarm of intervention is encouraged to sustain the military ardor of the nation under present circumstances; for it is difficult to suppose that any sane man could believe for a moment that England would interfere in the present quarrel otherwise than in a friendly spirit. Hereafter there can be no war between an European Power and the United States. Iron-clad steamers torrid it.

**NEW MODE OF CATCHING TROUT.**—Levi Bartlett describes in the *Country Gentleman* some trout ponds on the farm of Colonel Tappan, of Bradford, N. H., and speaks also of the mode of feeding. Last winter, after the ponds had frozen over, he states that a boy was sent to feed the trout with chopped meat. Having cut a hole through the ice and put in the meat, the boy lay down with his face near the water to watch the fish, when a trout grabbed him by the nose, and the boy by a sudden jerk of the head, threw the fish upon the ice. He thus obtained a trout of three-fourths of a pound weight, but at the expense of a sore nose for three weeks.

According to Simon's analysis, healthy blood contains in 1000 parts—

Of water.....	797.707
Fat.....	2.346
Fibrin.....	2.104
Albumen.....	76.600
Globulin.....	103.022
Hematin.....	6.209
Extractive matter and salts.....	12.012

**SOURS OF ACIDS.**—The sourness of the juice of a lemon and the acidity of vinegar are so well known that the mere mention of them is sufficient to convey a knowledge of the chief qualities of sours or acids in their natural state. There are so many acids that two or three pages of an index to a chemical book are taken up in enumerating them. Every fruit contains an acid; nearly all the minerals are capable of forming acids. When coal, wood, paper, rag, charcoal, brimstone, phosphorous, and many other substances are burned acids are produced. A flint stone is an acid. There is an acid in our window glass, and in many of the most costly precious stones. The air we breathe contains an acid. We create an acid in the lungs by the act of breathing.—By a very slight change sugar can be converted into oxalic acid, which is a strong poison. Sugar by another change, is converted into vinegar. These two illustrations show that a sweet can be converted into a sour; but when sour fruit becomes sweet it proves almost to demonstration that a sour can become a sweet acid.

The most powerful acid is that derived from burning sulphur—it is called sulphuric acid, and is one of the most important articles of manufacture. Its acidity is so great that a tea-spoonful is sufficient to make a painful of water quite sour. Nitric acid obtained from niter, or saltpetre, is of the next importance in the arts; it is so corrosive that it has long been distinguished by the name of *aqua fortis*, that is, strong water—strong, sure enough for a nodule of iron, lead or silver, dissolves in it like sugar placed in water. From the number of acids which we find in nature, and the tendency of many artificial substances to become sour, it is evident that acids and sours are essential to our life and well being. Acids assume all forms and colors; some are liquids, some gaseous, others solid. The acids of fruits when separated from the grosser particles that accompany them, are very beautiful and crystallizable substances. By the ingenuity of the chemist the sour or unripe apples, grapes, tamarinds, lemons, &c., may be crystallized into beautiful snow-white bodies, which, however, when touched by the tongue, at once indicate their origin by their flavor.

**THE NEW METAL THALLIUM.**—This new metal, which was discovered by William Crooks, of London, has lately been described by the discoverer in the *Chemical News*, and preparations of it have been placed in the Great Exhibition.—Thallium, in most of its physical properties, resembles lead. It is not so white as silver, but when freshly cut, it presents a brilliant metallic luster. It is soft, malleable and easily cut with a knife, and it marks paper when rubbed upon it, leaving a yellowish streak. It has a great tendency to crystallize, and ingots of it crackle like those of tin when bent. To flame it communicates a deep green color; and in the spectrum, according to the researches of M. M. Bunson and Kirchhoff, its single green ray is as sharply defined as the yellow ray of sodium. Thallium rapidly tarnishes in the open air, and it becomes covered with a thin pellicle of oxide which, like the oxide of tin, preserves the rest of the metal from oxidation. Its oxide is soluble, alkaline in its nature, and it has a taste and smell similar to potash. Sulphuric and nitric acids dissolve it under heat, and it burns in chlorine gas heated to 200°. It exists in many of the pyrites that are used in the manufacture of sulphuric acid.

Three inventions have appeared lately that will, perhaps, ultimately revolutionize those branches of industry they are designed to effect. One is an engraving machine, which produces on steel designs from surfaces, either flat or in relief, with marvelous fidelity. The second is a spiral trowel, which, when attached to a plowshare, cuts a round hole, so that, in a few hours, a permanent drain is formed—the processes of plowing and draining going on simultaneously. The third is a trifle, but a useful trifle. It is a match which cannot be ignited by any species of friction, nor by fire itself, but only by being rubbed against the box prepared for its reception, which is coated with the flame-giving property.

**MANUFACTURE OF SHOT.**—The Dubuque shot tower having been purchased and closed up by a St. Louis house, in order to remove its competition, the citizens of Dubuque became indignant, and commenced experimenting to make shot by dropping metal down the deserted lead mine shafts, and with the most satisfactory results. They are now going into the business quite strongly, having decided that there is no necessity for building fifteen thousand dollar towers, when a hole in the ground, with an expenditure of \$500, will do as well.

**TWO WAYS OF FISHING.**—Rev. Dr. Bellows says that when men go a fishing for trout they take a light, tapering pole, with a fine silken line attached, and a sharp hook with a sweet morsel of worm on the end. They noiselessly drop the line on the water and let it float to the fish, which nibbles, and by a slight twitch is landed safely on the bank.—But when men go fishing for souls, they tie a cable to a stick of timber, and an anchor is the hook. On this a great chunk of bait is stuck, and with this ponderous machine grasped in both hands, they walk up and down thrashing the water, and bellowing at the top of their voice—"Bite, or be damned."

The purest metal is produced from the hottest furnace, and the brightest thunder bolt from the darkest storm.



## TO MINING COMPANIES.

We earnestly solicit from mining companies and associations the following blank statement, filled according to the data hereby accompanying. The purpose for which we seek this information is important to every citizen and stockholder on this coast; it would also be productive of beneficial results—i. e., inducing capitalists to invest in our mining operations, thereby infusing new life and vigor into business generally in our States and Territories. Little, if anything, is known of our metallic wealth in Europe or the Eastern States, hence we desire as much of the blank filled by you as may be interesting and instructive to the people of this State and those interested abroad.

We know of no mining district in Europe or America where this kind of information is not willingly rendered by parties owning property of this nature; and we know of no better medium for making public the richness of our mines. We shall send blanks to mine and mill proprietors for every quarter, and will gladly publish the contents for the information of the community:

Title of Company and names of officers for the year.	Am't of stock & value per share.	When incorporated

Location.	Average assays of ore.	Process employed and number of stamps.	General remarks.

## Routes and Fares from San Francisco to Foreign and Domestic cities.

**Pacific Mail Steamship Company**—Steamers leave for New York *via* Panama, on the 1st, 11th and 21st of each month. 1st cabin, \$250; 2d cabin, \$200; 3d cabin or steerage, \$100.

**Nicaragua Steamship line**, Ross, Dempster & Co., agents. —Steamers leave for New York *via* isthmus of Nicaragua, on the 21st October, and semi-monthly thereafter. Price of fare not yet stated.

## PALMER, HANSCOMB &amp; CO.,

**Golden State Foundry and Machine Works,**  
First Street, near Market, San Francisco, Cal.

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications. Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast. San Francisco, November 29, 1862 3m

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 ACRES, HAS RECENTLY been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to  
HARVEY S. BROWN,  
No. 19 Naglee's Building.  
Lithographic Maps can be seen and had at the above named office,  
no 13 6mo

## DEETKEN'S

**Chemical and Metallurgical Works,**  
ON SAN BRUNO ROAD, ISLAIS CREEK,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov8-3m

## JULIUS SILVERSMITH,

## COMMISSIONER FOR NEVADA TERRITORY.

OFFICE, IN LATE STATE CAPITOL,  
Corner of Battery & Washington sts., Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE WHO HAVE BUSINESS relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

LEANDER RANSOM,  
CIVIL ENGINEER  
AND SURVEYOR.

Having been connected with the public works of the State of Ohio for 20 years, and the public works of the State of California for 7 years.

## ALSO, STATE LOCATING AGENT.

And as such having the sale of  
600,000 ACRES OF THE STATE SCHOOL LANDS,  
At the low price of \$1.25 per Acre.

Terms—Twenty-five per cent. in cash, and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct 3m

AGENCY FOR PATENTS.—The undersigned having been long established in the Patent Agency business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)  
REAL ESTATE AGENT,  
410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, LOANS NEGOTIATED

**Washoe Stock Exchange,**  
N. E. cor. Montgomery and Merchant sts.,  
SAN FRANCISCO.

L. W. NEWELL & CO.,  
Buy and sell Washoe, Emeralds and other Mining Stocks and Securities.  
sep20

THEODOR KALLENBERG,  
MAKER OF MODELS  
for Inventors,

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments  
Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to. au7 3m  
(No. 4 Sansome street, corner Market, San Francisco.)

DEVOE & CO.'S  
STEAM ENGINE  
—AND—  
MACHINE WORKS,  
Corner Market & Fremont streets, San Francisco.

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILL  
Iron, Flour Mills, Quartz Mills, etc., etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT  
Cutting  
AGRICULTURAL MACHINERY of all kinds made and repaired.

Duplicate parts of **Thrashing and Reaping Machines** and  
Thrashing Teeth made to order, on the most reasonable terms.

Steam Engines and Boilers constantly on hand, and for sale  
cheap. Screw-Cutting Turning Lathes for sale. DEVOE & CO.  
jul8

LATEST IMPROVEMENT  
In LADIES' BUCKLES.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS  
State, as well as to Jewelers and dealers in Jewelry, that he has made  
important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or  
address, FREDERIK REICHEL,  
Manufacturing Jeweler,  
620 Merchant street, San Francisco.  
sep11

THE  
NEW ENGLAND SEWING MACHINE for \$25!

THIS MACHINE stands confessedly at the head of everything now before the public. In cheapness, neatness, compactness, durability and beauty, it has no rival. It is made with special reference to the wants of a family, and any one with the aid of the printed directions can learn to work it successfully in a few hours. It will work from leather to the finest cambric without the change of needle, tension, or feed. It gives the best satisfaction where it is sold, and all who use or examine pronounce it better adapted to meet the wants of every family than any other machine now offered to the public. Gauge and hemmer attached.

Every machine warranted, and kept in order free of charge. This is the only cheap machine that will do all kinds of family sewing.  
STEWART & SHEAR, General Agents,  
No. 60 Second street.  
sep11

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of  
Deeds for California Virginia City, N. T. my23

THE FOLLOWING GOODS TO BE FOUND AT  
H. D. PEARCE'S:

Gents' Heavy Gold Cases, different patterns;  
Ladies' Heavy Gold Cases, do do;  
Gold Telescopic Pen and Pencil Case;  
Extension Screw, Heavy Silver, for Gents;  
Extension Screw, Heavy Silver, for Ladies;  
Silver Extension Cases;  
Silver Telescopic Cases;  
Screw, Silver and Ebony Desk Holders;  
Slide Silver and Ebony Desk Holders;  
Reverse Silver and Ebony Desk Holders;  
Pen Holders, Silver and Ebony;  
Pen Holders, Gold and Ebony  
Pen Holders, Gold and Ivory;  
India Rubber Propelling Pen and Pencil Cases;  
India Rubber Propelling Pencils, short.

All the above goods are made to order and warranted; will be sold cheap for cash. There are some thirty different patterns, leaving an opportunity for parties to select and be suited.

A cheaper class of Pens direct from New York, at wholesale only.

Gold Pens constantly on hand. Gold Pens repaired.  
H. D. PEARCE,  
606 Montgomery street, between Clay and Merchant, up stairs.

GREAT REDUCTION  
IN PRICES.

**STANFORD BROTHERS,**  
121, 123 and 125 California Street,  
KEEP THE LARGEST STOCK OF ALL KINDS  
OF  
Lamp Stock,  
And will Sell Cheaper than any House in this State.

LAMPS,  
CHIMNEYS.  
WICKS,  
CAMPHENE,  
BURNING FLUID,  
ALCOHOL,  
TURPENTINE,  
COAL OIL,  
KEROSENE OIL  
COMET ILLUMINATING OIL.  
SPERM OIL,  
LARD OIL,  
MACHINERY OIL,  
RAPE SEED OIL,  
CHINA NUT OIL  
LINSEED OIL, Raw and Boiled,  
POLAR OIL,  
SHARK'S OIL,  
NEATSFOOT OIL,  
TANNER'S OIL,  
&c., &c., &c.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. ap1861

**PHILADELPHIA BREWERY,**  
Second street, corner of Folsom, SAN FRANCISCO, CAL.  
Hölscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom. Nov9.

## FULTON FOUNDRY AND IRON WORKS.

**HINCKLEY & CO.,**  
MANUFACTURERS OF STEAM ENGINES,  
Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings,  
Mining Pumps, and all kinds of Machinery,  
Amalgamators, Etc., Etc.  
47 & 49 First Street,  
BET. MARKET AND MISSION, SAN FRANCISCO

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to Iron when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.

D. B. HINCKLEY WM. E. WORTH. WM A. FIELD

## SQUARZA'S PUNCH.

## HOME MANUFACTORY,

WHOLESALE AND RETAIL.  
No. 44 Leidesdorff street, near Sacramento st.  
Branch at 406 Montgomery street. my30

A. S. ROSENBAUM & CO.—Importers of pure Havana Cigars, Tobacco, etc., corner Clay and Battery, 26 and 27 Cedar street, New York.



## Mining and Scientific Press.

W. B. EWER, Editor.

SATURDAY..... NOVEMBER 29, 1862.

The MINING AND SCIENTIFIC PRESS is published at the Federal Building, Room 24, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance. Advertisements, Fifty Cents per line. A liberal discount made to quarterly advertisers.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING, designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plans or Colored Printing.

JOB WORK.—executed with dispatch at the cheapest rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## Incorporated Mining Companies.

The furor for incorporating Mining Companies under the Laws of the State of California, seems to be on the increase, and not a day passes that some Company with a nominal Capital, ranging from \$100,000 to \$500,000, is not incorporated, by some of our Courts. Although liable to abuse, this is undoubtedly the best method of working and managing the financial affairs of a Mining Company, as it facilitates business, enables parties interested to buy and sell, or borrow upon their interest in the mine, and in various other ways brings undoubted benefits with it. The *'modus operandi'* is simple and as follows: All the parties interested in a Ledge or Claim, being desirous of forming a Joint Stock Company, meet and adopt a name and a code of By Laws for the new Company. They then prepare in due form a Certificate of Incorporation, which sets forth the intention of the parties, and the names of the Trustees of the company, this, being signed and acknowledged, is filed with the Clerk of a Court of competent Jurisdiction, and a certified copy sent to the office of the Secretary of State, after which a trust deed of all the right, title and interest of each of the parties owning in the mine is signed, acknowledged and recorded, conveying to the Company all their interests in the mine. The proper officers are then elected, the books opened and stock issued. Then the Institution is fairly afloat, on the tide, either to become a permanent, paying fixture, or to subside and die suddenly out.

For the facilitating of business, the collection of assessments, and the general system of conducting the affairs of a Company—there is nothing like an Incorporation. But the great trouble with it appears to be, that the miners of Nevada Territory (where the principal Incorporations have been effected) have conceived the erroneous idea, that the simple form of issuing stock must necessarily give value to the mine it represents—losing sight of the fact, that stock of any kind which does not pay dividends, is substantially valueless.

The mines of Washoe have now been open long enough for them to commence paying their owners, and with proper management, there is not a developed mine in the Territory that could not be made to pay dividends, which, however small, would serve to renew the confidence which is now beginning to wane in Incorporated Mining Companies.

CANADIAN PETROLEUM—ITS ORIGIN.—The Canadian *Journal of Art* asserts that Canadian petroleum is not derived from coal, nor is it of recent origin. It says:—

Petroleum was formed long before coal, and is the result of the decomposition, under pressure of an infinite number of oil-yielding animals which swarmed in the seas of the Devonian period, long anterior to the coal. The decomposition of marine plants may have given some oil to the rocks of Canada and the United States, which are saturated with this curious substance. The shale beds of Collingwood furnish an answer to those who object to the infinite number of animals it would require to produce the oil locked up in the earth. Those shale beds are composed altogether of the remains of Trilobites—they extend from Lake Huron to Lake Ontario, and far west and east of these lakes. The oil-bearing rocks of Canada were once a vast coral reef, extending from the Gulf of Mexico to Lake Superior. There is the best ground for belief that the supply of oil will last for a long period, and that new discoveries will be made in different localities.

ANOTHER ASTEROID was discovered by Henry M. Parkhurst, at New York, on Sept 25. It is in the constellation *Pisces*, and is of the eleventh magnitude.

## MONEY NOT WEALTH.

A correspondent has furnished a communication controverting the leading article in the "Scientific American" of November 8th, which appears under the title of "The Gold Mines of California of No Value to the World." Our correspondent characterises the article in the *American* as "ridiculous reasoning." If our friend will carefully re-examine the same he will find that the only proper application of his term to the article in question, is to the impropriety of its heading. Of course, the proposition that "The Gold Mines of California" are of "No Value to the World," is ridiculous in the extreme. But the *American*, after announcing the above proposition, immediately loses sight of it and proceeds to discuss the very different proposition that "Gold-Mining, provided the metal is used for coin, adds nothing to the wealth of mankind." This latter proposition, we apprehend, our correspondent will admit is correct, and incontrovertible. Gold, when "used for coin" may be a valuable auxiliary in the transaction of business, as a representative of wealth—but no amount of gold, manufactured into coin, can add as much to the value of the wealth of the world as a simple plow made of iron. The following which we quote from the *American* is correct reasoning, in the main:—

If a man owns a steam engine worth ten thousand dollars, the engine forms this portion of the wealth of the world.—And if the man devotes his surplus labor, besides that which is necessary to procure a living, or expends his surplus profits in constructing a second engine of equal efficiency and value, he adds another ten thousand dollars to the wealth of the world. But if he expends the same amount of surplus labor or profits in simply adding to the weight of his engine, without increasing its efficiency or usefulness in any respect, he does not by the operation augment the wealth of himself, of the community or of mankind. In complex states of society, the innumerable exchanges of property which people mutually desire to make, are effected through the medium of money. The article which first came into use as money were the more valuable metals. As civilization advanced, and the organization of society became more complex, certain individuals and associations exchanged their notes, promising to pay either gold or silver or platinum on the presentation of the note, and these notes also came into use as money, being received by persons in exchange for articles of value on the faith that the stated quantity of valuable metal could be obtained for them at any time. The money in circulation in this country amounts to about two per cent of the whole wealth of the country. Now the point that we make is, that this proportion (of two per cent) will not be altered by doubling the amount of money in the world; for prices will advance so as to double the nominal value of other property, and thus the proportion will be maintained.

"The Gold mines of California" have proved valuable auxiliaries to the increase of the wealth of mankind within the past twelve years. The addition of the \$700,000,000 which they have given to the "circulating medium," has produced an impetus to commercial and mechanical pursuits which is truly astonishing. They have failed, as we think, to increase the percentage of wealth in proportion to the increase of the percentage of the "circulating medium," as, in the opinion of the *American*, must be the universal law of the increase of coin; yet they have done better than that—the facility which they have afforded by their increase to a reliable circulating medium has so stimulated all branches of business, and in such a healthy manner, as to greatly increase the proportionate wealth of the world to its proportion of circulating medium. In all this, however, in far as their yield has been converted into coin, the "Mines of California" have added nothing to the actual wealth of the world. A coined dollar of California gold is simply a representative of a certain amount of wealth. Destroy its value as a representative of that wealth, and it will be sought after no more earnestly than will its equal weight in iron.

COAL OIL FOR DRILLING GLASS.—A correspondent of the *Scientific American* says that the best lubricating fluid for drilling glass or very hard steel is coal oil. The direction is to merely wet the point of the drill with the fluid when it is found to give the instrument a better "bite" than anything else. The correspondent says he has thus drilled into the edge of common window glass to the depth of an inch, using a drill one forty-eighth of an inch in thickness. The glass is not so apt to flaw, or break, as when other substances are used.

THE finest features of the face are chiseled by the mind—as the latter becomes cultivated and refined, the former becomes more and more beautiful.

## Imports and Exports—The Currency Question.

Our imports, during the nine months preceding Nov. 1st, have been only about \$30,000,000 in excess of our exports; yet our exports of specie have reached, during the time, the high figure of \$45,000,000. The balance of trade has but little to do with this extra outflow of gold. This excess of specie shipments is due in part to the large transfers of capital which are now being made for investment in foreign stocks, but mainly to the present depreciated condition of our currency. This currency depreciation has increased the rates of foreign exchange about 30 per cent, which, in effect, is equivalent to an export tax of that amount on all produce and manufactures shipped to foreign ports. Our exports the current year are estimated at about 200,000,000. The present high rate of exchange, therefore, is equivalent to a direct tax of \$60,000,000 on our exporters, or, indirectly on the consumers of imported goods. This is the annual rate of amount which our people are now paying as a consequence of our present disorganized currency. The burden might be borne more resignedly, if that amount were being paid into the National Treasury—but when it is borne in mind that this large sum of money goes into foreign hands, and to that extent directly impoverishes our people, the fact calls loudly upon the incoming Congress to devise some means to remove this great burthen from the nation. Congress can undoubtedly accomplish such an act, without overstepping its constitutional limits.

It has been suggested that the end desired may be reached, or at least very closely approximated, by the Government simply confining itself to the paying out of Certificates of Indebtedness, only instead of Demand Notes, which, when paid in, should be retained and destroyed. This, with a vigilant and economical prosecution of the war, with a view to its speedy termination, would, no doubt, greatly reduce the premium on gold, and, to that extent, relieve the people of the present indirect system of taxation in favor chiefly of a Power which entertains but little sympathy for the Cause of our National Unity. The people earnestly demand some action in this matter.

THE HEIGHT OF AN OCEAN WAVE.—It was prophesied that Mr Brunell's first ship, the Great Western, would be doubled up as she rested on the crest of the Atlantic waves; and we all know how the prophesy was fulfilled. When it was made, indeed we were very much in the dark as to the size of the ocean waves, and it was not until the introduction of long steamers that they could be measured with any accuracy. Dr. Scoresby, while crossing the Atlantic in one of the Cunard boats, some years since, closely observed the waves, and by means of the known length of the ship, was enabled to form a pretty accurate idea of their dimensions. The old vague account of their being *mountains high* was well known before that time to be an exaggeration; but we do not think that even philosophers were prepared for the statement made by this observer, at a meeting some years since, of the British Association, that they averaged no more than twenty feet in altitude, and rarely exceeded twenty-eight feet.

OCEAN HIGHWAYS.—Persons who do not pay special attention to nautical matters, are likely enough to suppose, that considering the large number of vessels at sea, the surface of the great ocean must be dotted over, almost in every part, with the sails of the countless fleet. This, however, is not the case; the ocean, like the land, has its frequented highways and its wide regions of loneliness. If an observer, furnished with a forty-Herschell telescope power of vision, could be elevated to a height great enough to give him a view of the whole Atlantic, he would be struck by beholding hundreds of vessels following one another upon certain lines along a very irregular course, while over a very large portion of the surface not a sail would be visible. In the extensive spaces on both sides of these "Ocean Paths," few vessels will be seen.

MAP OF NEVADA TERRITORY.—Warren Holt, Esq. has just issued another splendid map of Nevada Territory, compiled and drawn by Dr. Henry Degroot, the editor of the *Virginia City Times*. Thus far no better map has appeared and its sale has been extensive. It appears to contain every place and district of note and is executed on copper plates and colored. It will prove valuable and instructive to those interested in that quarter.



**A New Amalgamator.**

The Miner's Foundry, of this city, has been for some weeks engaged in casting and finishing off a number of amalgamating pans or tubs, on a new principle. They are the invention of Mr. Zenas Wheeler, formerly of Grass Valley, Nevada county, and will be known as "Wheeler's Amalgamators." They may be used for both gold and silver. One principle involved in this invention is that the amalgamating and triturating is done in one set of tubs or pans, and the separating (of the quicksilver and amalgam from the sand) is accomplished in another. A set of these pans was constructed at the above foundry and forwarded to the Zephyr Flat mill, on Carson river, owned by Messrs Raymond & Thomson, about three months since, where they have been running, side by side, with the pans in common use, and operating upon a common vat of sands from the mill. The difference in the yield of the two classes of pans, as we learn from several letters from the proprietors and agents of the mill, which we have been allowed to examine, has been from 20 to 30 per cent in favor of the Wheeler pan. This percentage is certainly very large, and we should hesitate to give it were we not able to do so upon the authority of the owners and agents of the mill, who have no other interest in the invention than the providing of the most efficient process for saving the mineral from their ores. The ore upon which the mill is running is the 3d class Ophir ore, a large quantity of which has been sold by the Ophir Company to Messrs Raymond & Thomson. These gentlemen have shown their confidence in the Wheeler pans by ordering eight more of them, (a full compliment for the mill.) The order has been filled as above, and the pans are already at the mill, and will soon be at work. Mr Wheeler has secured a patent for his invention. We shall give an illustration of it next week, or the week after, and a full description. We trust this invention may prove to be all that it is represented. Every invention tending to improve our mining facilities adds materially to the wealth of our State by increasing the yield of her mines.

**MACHINES AND DEVICES FOR THE REDUCTION OF ORES.**—It seems from present appearances, that most Mining Associations, throughout this State and Nevada Territory, are doing very little in the working of ores except by the modes heretofore employed, and in the latter district they are falling back upon Mexican and German processes. A most happy omen has manifested itself, namely: that when a professional quack arrives with new processes, he is viewed with suspicion and distrust, hence their operations are limited and short lived in that quarter. Our stamp mills as constructed by the different foundries in this city, seem to fully answer their intended purpose. An innumerable number of pans for amalgamation have, of late, been presented to the mining public, many of which are employed with great advantage, and form, at present, the chief utensil in Washoe for extracting silver and gold. The Freiberg barrel process seems, however, to gain over all new fangled notions, a few of the leading companies having adopted this mode already.

The latest discovery announced is that of a smelting furnace on an entirely new principle—the oxygen of the atmosphere being the chief or only fuel employed. This invention is designed to do away with all reduction works and extract the ores by smelting alone. The inventor is a lady, Mrs. E.J. Hall, of this city. We have in our office the result of the last attempt to put the invention to a practical test. It was tried upon copper ore, with but partial success. It is claimed, however, that the failure was caused by an improper construction of some portion of the furnace, which cracked during the progress of the experiment. We are told that another trial is to be made soon. Whenever any successful and practical result is attained we shall be happy to announce the same and do what we can to bring the invention into notice and use.

**GRAIN SHIPMENTS.**—Large quantities of grain and flour are now being shipped from New York to Europe. During the week ending October 17th, there were thus shipped from that port, 1,140,750 bushels of grain, and 40,138 barrels of flour—in addition a general assortment of other provisions.

**Metallurgical Treatment of Pyrites.**

No mining district or country outside of Mexico and the South-American states, has ever furnished a greater field for the extraction of precious metals from Pyrites, than this State and adjacent Territory. Comparatively few have even succeeded in making this branch of industry pay, owing to immense expenses, time and labor required in treating minerals of this nature; and at present, only Pyrites containing a goodly portion of gold, will pay to work. It may be safely estimated (although many reducing establishments concentrate their sulphurets or pyrites) that, perhaps millions of dollars are allowed to float and pass through the tail-races and streams, in a year. The metallurgical treatment of pyrites is one involving great chemical skill, and can only be undertaken by persons of experience. Although many general processes for the reduction of ores have heretofore failed, yet a universal method for treating pyrites has of late been patented, which works successfully, and greater results have been obtained by this process, than by any other method heretofore known. A short distance from this city, on the San Bruno road, may be seen a newly constructed edifice, containing a reverberatory furnace of considerable capacity, several vats, from 6 to 8 feet in diameter and from 4 to 5 feet deep, metallic gas generators, together with much chemical apparatus, and paraphernalia requisite in a well established metallurgical work. The process which this enterprising proprietor employs has just been patented and is known as the Hydro-chloric process. In a former edition of this journal we gave a description of the *modus operandi*. Many mill owners and mining companies have made arrangements with this establishment for the reduction of their sulphurets, and shipments arrive constantly at the works, which are not far from a landing on the bay. The gentleman who has erected these works is Mr. G. F. Deetken, who has had years of experience in this branch, he has also adopted expeditious plans for concentrating the sulphurets or pyrites, and he shortly anticipates to contract for their pyrites, with all the mills in the State, either purchasing the same at the assay value, or reducing the same for a stipulated percentage. It may be safely stated that from 20 to 30 per cent more of the gold may be gained, than by any of the amalgamation processes.

**PRESSURE OF STEAM IN BOILERS.**—A pamphlet has been published in England by Mr. Anderson, the well known machinist, on the management of steam boilers, in which he says that the pressure within a steam boiler is greater than is generally supposed. With a pressure of fifty pounds per square inch, it amounts to 7200 pounds on every part of the surface exposed to the steam, amounting frequently to many thousand of tons in the boiler, thus accounting for the enormous havoc made by explosions. The joints are weaker than the solid parts; good solid plate will withstand from 56,000 to 60,000 pounds per square inch of sectional area—the joints will give way at about 34,000 pounds, which shows the importance of seeing that the rivets and other fastenings are always in sound condition. Mr. Anderson divides explosions into four classes, namely, from want of strength, deficiency of water, heating of plates, and a variety of other circumstances.

**THE TWINKLING OF THE STARS.**—According to M. Arago, astronomers and others have failed to arrive at a satisfactory explanation of the twinkling of the stars on account of their failure to give an exact definition of the term scintillation. He affirms then, that, in so far as naked eye observers of the heavens are concerned, scintillation, or twinkling, consists in very rapid fluctuations in the brightness of the stars. These variations are always accompanied by variations of color and secondary effects, which are the immediate consequences of every increase or diminution of brightness; such as considerable alteration in the apparent magnitude of the stars, and in the length of the diverging rays, which appear to issue in different directions from their centers. It has been remarked from a very early age that the phenomena of twinkling is accompanied by a change of color. It is asserted that the name of Barakeach, given by the Arabians to the star Sirius, signifies the star of a thousand colors. M. Arago also asserts that the planets twinkle.

The less a man knows, the wider his mouth opens. It is as impossible for a fool to keep his jaws shut as it is for a sick oyster to keep his shell closed.

**Mining Stock Report.**

SAN FRANCISCO, Nov. 28th, 1862.

During the past two weeks the Mining Stock Market, in this city, has been more active than for some weeks previous.

Ophir, appears to be steadily advancing. Sanborn's circular of last week quotes one sale of 16 shares (3 feet) at \$6000 per foot, on 60 days. Sales have varied during the last ten days from \$2,525 to \$3000 per foot. The Market for this stock is very irregular. Buyers at the present time are evidently basing their operations somewhat on the expected dividends for this month. 17½ feet changed hands last week.

Gould and Curry is steadily advancing—probably with the expectation of an early starting of their new and extensive mill. The quotations for the week have run from \$2,200 to \$2,300 per foot.

California is quoted at \$1,400. Market quiet.

Chollar, rests quiet at present, with small sales at slightly reduced rates of previous quotations. It is firm at \$275—\$280 asked.

Potosi has been but little enquired for since the late adverse decision with regard to title. It is quoted at \$70—enquired for at \$65. North Potosi is quoted at \$9—offered at \$12 with no sales.

Sierra Nevada has improved somewhat during the week. It is quoted at from \$75 to \$80.

Danby is quoted out at \$200—220 asked.

Burning Moscow, Considerable has been done in this stock during the last ten days. Quoted at \$60 to \$75. Being freely offered, of late, its tendency has been slightly downward. Present indications, however, intimate an early advance.

Mount Davidson is selling from \$5 to \$6 50

Meredith is quoted at \$15 to \$20—an advance of \$5.

Burnside is quoted at \$22 to \$25—Buyers free at \$20 to \$22.

Iowa quoted at \$130 to \$140.

Norton quoted at from \$12 to \$15—a large advance.

Sacramento is quoted at \$25—Saleable at \$22.

Hazel Green which has recently struck their ledge, was at first thereafter quoted at from \$6 to 10, but owing to a general disposition of share holders to sell, the stock declined to \$5. Late accounts, however, report that the workmen continue to make developments of a valuable mine, and it is confidently expected that there will be an early demand for the Stock at advanced prices.

Chenango saleable at \$1½ asking 3. St. Louis \$3. Kutch & Baker ground has been enquired for at \$10 to \$12—none offered. Cedar Hill Tunnel is held at \$8—no sales. Late discoveries at that point will probably soon bring out purchasers. Rogers is quoted at \$22½.

**Emerald Stocks.**

Wide West appears to be a live institution and is quoted at from \$365 to \$400 in Sanborn's Circular of Nov. 22, and at \$395 sales and \$420 asked, in the Bulletin Mining Stock report of Nov. 25. It has improved about \$90 during the week.

Antelope is quoted at \$65—with \$75 to \$100 asked.

Elton is quoted at \$8 and \$10 is asked.

Silver Hill quoted at the Mining Board at \$10.

Utah has no buyers—held at \$40.

Rio Del Monte quoted at \$11 with \$15 asked.

**Coso Stocks.**

The Josephine, Coso and Willow Springs are the best known Stocks in this district—but no recent transactions have been made in either of them.—The former is held at \$20. No offers are quoted from either of the others.

**Mexican Mines.**

St. Nicholas Silver Mining Co. is quoted by Sanborn's Circular at \$100. Mina Prieta finds no recent buyers, but is held at from \$110 to \$130.

Dios Padre is held at \$50.

Considerable enquiry has recently been made for low priced stocks—more than has been manifested for some time.

**DELAY.**—The delay of our present issue has been unavoidable in consequence of the necessarily prolonged absence of the editor, to so arrange his business in the mountains that he might hereafter devote his entire time and energies to the management of the *Press*. This has now been accomplished, and he can promise the prompt and regular issue of the paper hereafter. Some weeks may elapse before he will be able to make it what such a paper should be; but, by the promised assistance of friends he confidently hopes, ere long, to render the *Mining and Scientific Press* a welcome and valuable weekly visitor to the miner and mechanic, the inventor and manufacturer, and indeed to every one in pursuit of useful and practical knowledge in every department of life and industry.

**IRON CLADS AND THE FEDERAL NAVY.**—There are at the present time not less than 384 vessels of all classes built and being built for our navy. Of these 13 are iron clad, now afloat, and 40—mostly gunboats, in process of construction. When these are all completed we shall number about 40 iron-clads—a number nearly equal, and quite as effective as all the other iron-clads of the world combined!

**EQUALIZING THE SEXES.**—At the outbreak of the present rebellion, as appeared by the census of 1860, there were 730,000 more males than females in the Union—a fact unprecedented in the history of any other civilized nation.—The war, however, is fast equalizing the sexes.

A full and particular account of the Grass Valley Silver Mines will be given in our next issue.



## Important Publication.

We have been favored, by the publisher, with the title page and prospectus of the quarto work entitled, "The Metallic and Agricultural Wealth of the Pacific States." The editor of this work has recently disposed of the "Mining and Scientific Press," with the view of devoting his entire attention to the publication of the work; to this end he is making arrangements for an early visit to the Atlantic States and Europe. The work if carried out according to the prospectus, will be one of the most valuable publications yet presented to the public, and will prove of incalculable benefit to California and the Pacific Coast generally, in bringing the immense mineral wealth of this region more prominently before the Capitalists of Europe. The object is a laudable one and ought to be encouraged. Mr. Silversmith is one of our oldest citizens and is well acquainted with the subjects of which he treats. He desires but little aid and that we trust he will readily obtain. The following is the prospectus:

## PROSPECTUS TO THE PEOPLE OF THE STATE OF CALIFORNIA, OREGON, AND ADJACENT TERRITORIES.

The Subscriber, one of your earliest citizens of California, and for the most of his time engaged as a journalist, and particularly of late in a journal devoted to the chief resources of the Pacific States, respectfully submits the following plan and proposition for the purpose of bringing hither from England, France and Germany the working classes, mechanics, artisans, miners, and metallurgists for the purpose of developing the resources of our thinly populated States and Territories, thereby reducing labor, the establishing of factories, the occupation of the millions of acres of arable land now lying dormant, and to work our mines. The benefits accruing to our Government—to marine conveyances—the merchant—the manufacturer, the mining companies and professional community, cannot but be beneficial, provided the facilities are offered to such emigrants, and according to the tenor of our laws governing such. For these purposes the subscriber desires to seek only the necessary or pecuniary aid to take him across the Pacific and Atlantic, so that he may be enabled to lay before the people of Europe a work which he has compiled from authentic sources, comprising the mineral wealth of the Pacific States, including partly Mexico, Lower California, British Columbia, etc., together with a synopsis of the climatology, agriculture, arts and manufactures, with interesting statistics of our imports exports, and population. Also, the organic acts of our State, the local and general laws governing mining, the Pre-emption Act, and kindred subjects pertaining to the Pacific States. The author reserving for himself the right of translation of this work (which has cost him three years of his time to collect and compile) in the German and French languages.

He contemplates making the tour to the Atlantic States and Europe in February or March, 1863, and will equip himself with the mineral materials, fossil remains, etc., and illustrate them by diagrams and discourses throughout the Atlantic States and Europe.

Such a work which your petitioner has in view cannot be published in this State without an extraordinary outlay, nor have we the materials, artists or skill in copperplate or wood engraving. The work will comprise from 400 to 500 pages, to be handsomely illustrated with colored plates, maps, etc., quarto form. The subscriber will add thereto a complete list of all the associations and companies, especially mining companies.

He goes to Europe for the purpose of seeing all the manufacturing places, machines and utensils; also to the leading mining districts and metallurgical establishments, to acquire from the best sources there the best mode of treating our rich minerals, and lay these several important features before our people through the Mining and Scientific Press, and the work he hereby offers. But the most important subject in his mission is the inducements he will offer to Europeans of our immensely rich mining fields and agricultural lands, together with the great advantages offered by a liberal and protective government for industrious citizens.

The subscriber, therefore, calls upon the citizens in the Pacific States who have the interests of our new States nearest their heart, to aid him in this grand but laudable undertaking with means. Each subscriber will be furnished with a copy of this work, which is designed to be useful in the counting house, to the professional man and miner. The author desires to state that whatever aid or subscription he may be furnished with by the people of this State he will refund after the publication of the work, or leave the amount to be taken out in books.

Respectfully submitted,

JULIUS SILVERSMITH.

**THE SPIDER.**—This sprightly little insect, usually so much dreaded, is as cunning and courageous, as he is watchful and active. He never hesitates to give battle when his inclination tends that way, and is prompt in his own defense when attacked. But Mr. Spider's morals are not of the best quality, and his voracious appetite sometimes leads him astray; for instance the male will frequently make a meal of his progeny, and highly relish the dish; but this is not always a safe operation, as the female is more affectionate, and loves them tenderly; and if she cannot save them in circumstances of peril, she prefers to perish with them.—The love which she bears to her little ones, she does not always extend toward her mate; but sometimes, after having in vain attempted to prevent him from devouring her offspring, she changes her tactics, and acting on the idea that a cannibal may himself be fit for food, she falls upon him—conquers him, and eats him up.

**WHAT IS DIRT?**—Old Dr. Cooper, of South Carolina, used to say to his students, "Don't be afraid of a little dirt, young gentlemen. What is dirt? Why nothing at all of offense when chemically viewed. Rub a little alkali upon that 'dirty-grease spot,' on your coat, and it undergoes a chemical change and becomes soap. Now rub it with a little water, and it disappears; it is neither grease, soap, water, nor dirt. 'That is not a very odorous pile of dirt,' you observe there. Well, scatter a little gipsium over it and it is no longer dirty. Everything you call dirt, is worthy your notice as students of chemistry. Analyze it! It will all separate into very clean elements.

"Dirt makes corn, corn makes bread and meat, and that makes a very sweet young lady that I saw one of you kissing last night. So after all you were kissing dirt—particularly if she whitens her skin with chalk or fuller's earth.—There is no telling, young gentlemen, what is dirt. Though I must say that rubbing such stuff upon the beautiful skin of a young lady is a dirty practice. 'Pearl powder,' I think is made of bismuth—nothing but dirt."

**ANCIENT DOCTORS.**—Mayerne, a French physician, who is said to have numbered among his patients two French and three English sovereigns—Henry IV. and Louis XIII. of France, and James I., Charles I., and Charles II. of England—was fond of dosing his patients with "pulverized human bones." A chief ingredient in his gout powder was "raspings of a human skull unburied." In the composition of his celebrated "balsam of bats," he employed "adders, bats, sucking whelps, earhewms, hog's grease, the marrow of a sag, and the thigh-bone of an ox." Belief in the efficacy of charms and amulets was once universal with the faculty, and precious stones were regarded as sovereign remedies. The hyacinth and topaz hung about the neck or taken in drink, were certain "to resist sorrow and recreate the heart." The sapphire was "a great enemy to black choler," and was believed to "free the mind and mend manners." A certain kind of onyx was supposed to preserve the vigor and good estate of the whole body. One physician went so far as to declare "that in the body of a swallow there is a stone found called chelidonium, which, if it be lapped in a fair cloth and tied to the right arm, will cure lunatics, madmen, and make them amiable and merry." Herbs were also in great request, and daisy tea was accounted a certain cure for gout and rheumatism. Dr. Bulleyn (of the same family as Queen Ann Bulleyn,) a physician in the reign of Elizabeth, prescribed for a child suffering under a certain nervous malady "a small young mouse roasted." The same doctor stated that "snayles broken from the shelles and sodden in whyte wyne with oyle and sugar are very holsonne, because they be boat and moist for the straightness of the lungs and cold cough."

**FATAL EXPERIMENT.**—A few years ago, a young lady in easy circumstances enjoyed good health; she was very plump, had a good appetite and a complexion blooming with roses and lilies. She began to look upon her plumpness with suspicion; for her mother was very fat, and she was afraid of becoming like her. Accordingly, she consulted a woman, who advised her to drink a small glass of vinegar daily; the young lady followed her advice, and her plumpness diminished. She was delighted with the success of the remedy, and continued it for more than a month. She began to have a cough, but it was dry at its commencement, and was considered as a slight cold which would go off. Meantime, from day to day, it became moist; a slow fever came on, and a difficulty of breathing; her body became lean, and wasted away; night sweats, swelling of the feet and of the legs succeeded, and a diarrhea terminated her life. On examination, all the lobes of the lungs were found filled with tubercles, and somewhat resembling a bunch of grapes.

**COMPOSITORS.**—Compositors are a placid and unimpressible race, who do their work dutifully, without yielding to the intellectual influences represented by it. A clause of an Act of Parliament, with all its whereases, and be it enacted, and hereby repealed, creates quite as much emotion in them as the most brilliant burst of the fashionable poet of the day. They will set you up a psalm or blasphemous ditty with the same equanimity, not retaining in their minds any clear distinction between them. Your writing must be something very wonderful, indeed, before they distinguish it from other 'copy,' except by the goodness or badness of the hand. A state paper, which all the world is mad to know about, is quite safe in a printing office; and they will set up what here is set down of them without noticing that it refers to themselves. It is said that this stoic indifference is a wonderful provision for the preservation of the purity of literature, and that were compositors to think with the author under the "stick," they might make dire havoc.

FRENCH glove-makers are said to derive a handsome revenue from the rats of the Paris sewers, the integuments of which vermin are converted into the most filmy of white gloves for use in London drawing rooms.

**RECENT PATENTS.**—Granted to CALIFORNIA INVENTORS through the Pacific Agency, J. SIEVERSMITH, Solicitor:

E. E. MATTESON, Nevada: *Hydraulic Derrick*. This invention has been illustrated in this journal, and has obtained great celebrity throughout the State.

ELANDER HEATH, San Francisco, *Spiral Spice and Sage Mill*. See "Mining and Scientific Press," June 9th, 1862, Vol. V., No. XIII.

G. F. DEETKEN, formerly of Nevada: *Apparatus for separating Gold from Pyrites*. This is one of the most useful inventions of the day. Mr. Deetken has successfully worked sulphurets for a number of years in Nevada county, professes to have obtained greater results than others engaged in the same occupation. Mr. D. has recently established himself in this County, on the San Bruno Road, near the Islais Creek, where he has erected chemical and metallurgical works.

**TIGHT BOOTS.**—For years there has been a great deal of fault found with the prevailing Paris fashions, because they necessitated the compression of ladies' waists beyond the natural limits; and we have been among the fault-finders, because that we believed that undue compression of any part of the human form is productive of evil results. We begin in the beginning with this matter, in the first place objecting *in toto* to the old-fashioned style of babies' belly-bands, and keep on with our objections whenever and wherever undue compression or restraint upon body or limbs is used.

Tight waists are our greatest abomination, and tight boots come next. They are not quite so life-destroying as corsets, but they are just as foolish; and he whose thoughts are kept down by corsets, bunions, and carbuncles never can expect to succeed. The dandy who will endure the misery of a tight boot for the sake of showing a small foot—and there are plenty of them—deserves no pity.

Bootmakers want reforming. There is no more than one in a hundred who knows how to make a good fitting article, and they will not learn, because people are not so particular as they should be. We would be willing to wager, if it were in our way, that there is not a dozen pair of feet in New York that have not been forced out of their natural shape by the shoemakers. True, we are not so bad as the Chinese, but we are bad enough.

The human foot is a very complex affair; its bones, and tendons, the nerves, and muscles are wonderfully arranged, and were at first all put in the position where they could work together for the best advantage, and it is our duty to keep them as nearly so as possible; and to do this, every full grown man and woman should have a pair of lasts of their own, made exactly like their feet, and should wear no boots or shoes not made carefully on these lasts.—*Hygienic Teacher*.

**HOW TO BREAK A BAD HABIT.**—Understand clearly the reasons, and all the reasons, why the habit is injurious.—Study the subject till there is no lingering doubt in your mind. Avoid the places, the persons, the thoughts that lead to the temptation. Frequent the places, associate with the persons, indulge the thoughts, that lead away from the temptation. Keep busy; idleness is the strength of bad habits. Do not give up the struggle when you have broken your resolution once, twice, ten times, a thousand times.—That only shows how much need there is for you to strive. When you have broken your resolution, just think the matter over, and endeavor to understand why it was you failed, so that you may be on your guard against a recurrence of the same circumstances. Do not think it a little or an easy thing you have undertaken. It is folly to expect to break up a habit in a day, which may have been gathering strength for years. This, in brief, is our answer to a question which is put to us by anxious inquirers from ten to twenty times a week.—*Hygienic Teacher*.

**A ROLLING STONE GATHERS NO MOSS.**—Well! what of that! Who wants to be a mossy old stone, away in some damp corner of a pasture, where sunshine and fresh air never come, for the cows to rub themselves against, and for snails and bugs to crawl over, and for toads to squat under among poisonous weeds?

It is far better to be a smooth and polished stone, rolling along in the brawling stream of human life, wearing off the rough corners, and bringing out the firm crystalline structure of the granite, or the delicate veins of the agate or the chalcedony.

It is this perpetual chafing and rubbing in the whirling current that shows what sort of grit a man is made of, and what use he is good for. The sandstone and soapstone are soon ground down to sand and mud, but the firm rock is selected for the towering fortress, and the diamond is cut and polished for the monarch's crown.

SEAWEED is being extensively used by New York upholsters in place of curled hair. It is said to be a very good substitute, and quite a brisk business has grown up on Long Island, in gathering and drying it for the market. It is put up in bales like hay.



**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA  
connecting via the Panama Railroad with the steamers of the Atlantic  
and Pacific Steamship Company, at Aspinwall.

### FOR PANAMA.

The following Steamships will be dispatched in the month of December 1862  
Dec. 1st—St. LOUIS, Captain E. S. Farnsworth,  
" 11—GOLDEN AGE, W. H. Hudson, Commander.  
" 21st—SONORA, W. F. Laidge, Commander.  
Will leave Folson Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York  
For freight or passage, apply to

**FORBES & BABCOCK, Agents,**

Je4 Corner of Sacramento and Leidesdorff sts.

### RE-OPENING OF

## THE NICARAGUA ROUTE!

People's Line,

CONNECTING CALIFORNIA AND NEW YORK.

700 Miles shorter than any other route!!

EXPECTED TO MAKE THE TRIP THROUGH  
WITHIN 21 DAYS.

The fast and favorite *Double Engine Steamship*

**MOSES TAYLOR, 1,500 tons,**

**E. HOWES** ..... Commander.

Will be dispatched for

**SAN JUAN DEL SUR,**

From Mission street Wharf.

Punctually at 9 o'clock A. M., of

**MONDAY, - - - - - DECEMBER 11.**

Connecting with the splendid Steamship

**AMERICA,**

2,000 Tons.....**JEFF. MAURY, Commander.**

**THE PEOPLE'S LINE**

Has been established on this

shortest, safest and Healthiest Route,

To meet the universal demand for an

**OPPOSITION,**

And every Californian should give it a preference for the public good, as  
well as his own private advantage, which will be secured by

**Reduced Fare, Good Accommodations, and Quick  
Trips.**

This line is intended to be a permanence, and is not put on for the purpose  
of being bought or driven off. Speed, safety and the utmost comfort of pas-  
sengers are the main objects. To secure these no merchandise freight (other  
than specie) will be taken. The **MOSES TAYLOR** is built with **Water-  
Tight Compartments**, and is unequalled for safety as well as speed.  
For information or passage apply to

**ROSS, DEMPSTER & CO., Agents,**  
426 and 427, Battery street.

### LABOR-SAVING

**Rock Drilling Machines.**

**TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRY-**  
**men.** The subscriber, Patentee and Agent for **GARDNER'S PATENTS**,  
will continue to receive orders for

**HAND, HORSE, AND**

**STEAM-POWER MACHINES.**

The Hand Machines are expressly adapted for working in Tunnels, Galle-  
ries, etc., one man performing the labor of three in the ordinary way.

A **FOUR-HORSE POWER MACHINE**, operated by one man, drives a ma-  
chine capable of drilling a four to six inch diameter hole in granite four feet  
deep, and in hard limestone, six feet per hour—the rapidity of the work  
being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the  
machine, and its entire success in reducing the cost of drilling holes to one-  
tenth of the former expense, and on a rock excavation of any extent, from  
fifty to seventy-five per cent. on the entire work. Responsible parties who  
have rock excavations to make in any part of the State, the subscriber will  
undertake and guarantee to perform the work required, at a saving of at  
least twenty-five per cent. over any other process.

Address orders to **WM. W. DENN,**  
oct-3m] Fremont street, bet. Market and Mission, San Francisco.

**F. G. BEPLER,**

**PRACTICAL COPPERSMITH,**

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery,

SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to  
say that I am ready to make and repair with cheapness and dispatch every-  
thing in my line of business; especially all kinds of apparatus used in Brew-  
eries and Distilleries; also, all such as are used where steam, spirits, or  
pumps of any kind be required. Also, Kitchen utensils for Hotels, Restau-  
rants and private houses. Baking apparatus for Bakers and Confectioners,  
as well as all other kinds of copper work.  
All orders from the country promptly attended to.

je6

## A. ROMAN & CO.

WHOLESALE AND RETAIL

## BOOK ESTABLISHMENT.

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular  
Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.  
Manual of Metallurgy, more particularly of the precious metals; but includ-  
ing such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of  
the Mine Agent and Smelter. By James Phillips and John Darlington.  
Piggot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Philips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell.

Liver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weybach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

Together with many other works in this & similar lines

Books imported to order on short notice.

**A. ROMAN & CO.,**

417 & 419 Montgomery Street.

## Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS. OR  
manufacturers of Horticultural Implements, are referred to the above  
invention. For description and engraving see MINING AND SCIENTIFIC PRESS  
No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentees),  
sep1-3m San Francisco.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache  
bekannt sind, können ihre Mittheilungen in der deutschen  
Sprache machen

Skizzen von Erfindungen mit kurzen, deutlich geschriebenen  
Beschreibungen beliebe man zu adressiren an.

**JUL. SILVERSMITH, Federal Building, Room 23.**

## RASCHE & SONS,

131 Montgomery street, bet. Bush and Sutter,  
SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

## PIANOS, SHEET MUSIC

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

**A. A. GALE & CO., New York;**

**T. GILBERT, Boston;**

**C. MEYER, Philadelphia.**

Whose Pianos they have always on hand, for sale and to rent.

**PIANOS FOR RENT.**

*New Music received by every steamer. New Music pub-  
lished. Music assorted and bound in the best style. A lib-  
eral discount made to the trade and professors of music.*

au14

## V. SQUARZA'S

## PUNCH FACTORY.

WE PRESENT HERewith THE PORTRAIT AND TRADE MARK OF  
the gentleman who heads this article. Mr. Squarza is favorably  
known in this State for his Anti-Divorce Liqueur and similar productions, as  
manufactured by him. We may mention that Mr. Squarza is an fair in the  
chemico-distilling science, hence the celebrity of his articles. He has two  
establishments for the sale of his famous Punch—one on Leidesdorff, the  
other on Montgomery street—which are constantly thronged with our bon  
vivaists.

The following is a list of his liquors, all of which we have tasted, and find  
them the most delicious and harmless beverages in this city, being pure,  
and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,	Anisette,
Cognac do.	Whisky do.	Kirschwasser,
Arac do.	Kirschwasser do.	Brandy Cocktail,
Anti-Divorce Punch,	Cocoa do.	Anti-Dyspepsia Bitters,
Coffee do.		Appetiser,
Tea do.	Morning Comfort,	Ladies' Tears.
Pineapple do.	Kuennel,	

And CHAMPAGNES of all brands.

**Dr. Van Zandt,**

Consulting Physician and Surgeon,

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practi-  
cal Medicine.

The Mysterious Problem of Material Nature, Electricity!  
Made Subservient for the Cure of all Nervous  
and Spinal Diseases.

**THAT THIS PRINCIPLE,** successfully applied to diseased states  
of the system, is to prove the great sought-for necessity, long wanted  
by physicians, to aid their medicines in overcoming organic and functional  
derangements of the human body. It is a part of the great principle of vi-  
tality known as nervous influence and necessarily must have much to do in  
obviating diseased action.

### Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equi-  
librium of the ELECTRIC principle; and should this secret and hidden equi-  
poise of health be broken or lowered—should the body be negatively electri-  
fied when it should be positively charged—is not the current broken, and is  
there not a war of forces going on in our system? This needs correcting,  
and in order that the tissues of the body should be susceptible to remedial  
agents we must first restore and

### Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly  
in this great magnetic or electrical intensity of the earth, with its influence  
upon our bodies in health and disease, I am led to take advantage of the  
press, through which to awaken attention to the subject, that good may  
come to all.

### No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life  
blood, render the stomach, liver, heart, kidney and all the natural func-  
tions active by ELECTRICAL excitation, and at once the aged, the palsied,  
the nervous, the dispirited, the melancholic, the dyspeptic and the invalid  
revive under its benign influence.

### To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and  
office practice, is owing to his correct views of the origin of all their mal-  
adies. Ladies can consult him with entire confidence, as he is no speculator  
upon human life—but is proving himself the only member of the legitimate  
profession in California who is really successful in removing those ills which  
are the peculiar province of the sex. His high appreciation of their deli-  
cately attuned nervous organism, together with their great sympathetic  
life, renders him doubly able to assuage those silent complaints which  
they bear so patiently and so long. No social disquietude need longer af-  
fect our home circles; for he can arouse the stricken energies; restore the  
wonted tenacity of the body; awaken the melancholic and desponding; ar-  
rest those drains which cause so much anxiety; cure those protean mal-  
adies which have so long

### Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at  
the stomach, wandering pains, wasting away of strength; extreme debility  
and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that  
general depression of life's powers, which go to render her life a misery  
and death a boon. Dr. Van Zandt, with his new method of exciting the  
Electro-Galvanic current, together with his remedial measures which are  
adapted to the necessities of California, will assure you of a complete and  
radical recovery of all bodily and mental infirmities, and will restore you  
to usefulness, and spare you a blessing to your family and to society.

### All the World Over

wherever disease exists, whether special to the soil and climate or com-  
mon to all regions—epidemic or casual, acute or chronic, contagious or non-  
contagious—it is as necessary to restore the ELECTRO-GALVANIC equilib-  
rium, especially in California, as it is to give food to the starving. This state-  
ment is based upon a series of facts extending through many years, and  
verified by hundreds of patients; so that no principle of science, no rule of  
experience, no result of any well known cure, rests upon more sure and  
unassailable foundations, than those which underlie the world-wide reputa-  
tion of Electricity for the cure of all nervous states of the body, faulty di-  
gestion, men al and physical debility or prostration, coughs, asthma, wan-  
dering pains of a rheumatic, gouty or mercurial character, and all forms of  
disease, the result of scrofula or coarctate habit of body.

### None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—  
melancholy which you cannot shake off—loss of power which you cannot re-  
gain—depression of spirits which weigh you down—wakefulness that knows  
no sleeping—business that languishes for want of energy—a void which no  
society can fill—suspicion which no assurance can allay—Go to Dr. Van  
Zandt, for great success, and the safety with which he administers his  
new method of electrical excitation, together with his remedies, which are  
adapted to the requirements of climate and constitution, will assure you a  
radical removal of all bodily and mental infirmities, within the scope of  
science and man to remove.

### The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt  
has made these afflictions an especial study, and that he is the only Sur-  
geon in our State, who has a diploma for that branch of practice. Very  
many of the eye and ear troubles are purely deranged nervous actions, and  
are cured by his electro-galvanic battery—as amaurosis, squinting, catar-  
act, floating specks before vision, twitching of the eyelids, nervous deafness,  
roaring and buzzing noises in the ears, giddiness, etc. All operations suc-  
cessfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29—3m

**FREDERICK KESMODEL,**

Cutler and Surgical Instrument Maker

817 KEARNY STREET,

Between Jackson and Washington streets,

SAN FRANCISCO.

RECEIVED a diploma at the Fair of the Mechanics' Institute, September,  
1868, also in Sacramento in 1861 for California made Cutlery.

This excitation of the affected with HERNIA, or rupture, or any one in-  
terested, is called to his new method of fitting and adapting Trusses to the  
different cases. It is a well known fact that there has as yet been no system  
of fitting Trusses. There are many different styles which have proven good  
in many cases, but they are all uncertain and cannot be relied on, and in  
severe cases are altogether useless. The following are some of the advan-  
tages I claim for these Trusses above any and all others: First—The Pad is  
formed on the parts to be compressed by taking a plaster cast. Second—  
Having a correct model, it enables me to make the Pad of any desirable  
material, such as horn, ivory, etc. Third—The Pad is so adjusted to the  
spring that no movement of the body will move or displace it. There are  
many other advantages. Examine and judge for yourselves.

**FREDERICK KESMODEL.**

Inventor and Patentee.

ap3 tf



## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual lost was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent. wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

## For parting silver from gold when gold

is below 300-1000ths. fine. . . . . 3cts per oz.  
 " from 300-1000ths. to 750-1000ths fine. 7cts " "  
 " " 750-1000ths to 950-1000ths " 14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight

301 " 500, 7cts, " " "

## DEPOSITS FOR FINE BARS

\$1.16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1.21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1.16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1.16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

In regard to the deposits of *Washoe silver*, the rule will hereafter be, that the value of gold contained in the same will be paid in gold coin, and the value of silver in silver coin. The value of the silver will be calculated at \$1.21 per standard oz., and is exempted from the coinage charge, unless deposited for silver dollars, in which case a charge of  $\frac{1}{2}$  per cent. will be made additional. Bullion of the above denomination will be entered on the gold and silver register, as most congruous with the physical aspects of the material, but in the warrant it must be marked that so much is to be paid in gold and so much in silver, according to the contents reported by the assayer. The above rules, and charges were promulgated on July 10th, by Superintendent Robert J. Stevens.

U. S. BRANCH MINT, Nov. 6th, 1861.

On and after the 15th inst., a charge varying in accordance and the character of the deposit, from half a cent to three cents per oz., gross, in addition to the general rates, and be imposed on all bullion deposited for coinage or manufacture, which will require toughening or extra refining to render it suitable for mint purposes.

ROBT. J. STEVENS, Superintendent.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, WHILE MR. BREWSTER was engaged in the Summer street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences. —[Evening Bulletin, Aug. 4.]

## THEN THIS!

## COMET ILLUMINATING OIL!

Manufactured expressly for Stanford Bros.

THIS POPULAR

## BRAND of KEROSENE

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

Best Family Oil in the Market

STANFORD BROTHERS,

ad14

Nos. 121, 123 and 125 California street.

## 50 lbs. MARINE AND FIRE-PROOF PAINT

MANUFACTURED BY THE PACIFIC METALLURGICAL WORKS, IN THIS city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 lbs. Fire-Proof Paint,

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof, as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FORCER, Superintendent.

WORKS, North Beach; Office, 318 California st.,  
SAN FRANCISCO

## WRIGHT'S PICKS.



JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.

## LEWIS COFFEY &amp; RISDON'S

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work or the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner of Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

A Circular containing further information, and a synopsis of the Patent Laws of various countries, will be furnished on application to J. Silversmith, Government House, San Francisco.

Miners, Inventors, Agriculturalists, Capitalist and Mechanics, will find it to their advantage to subscribe for the MINING AND SCIENTIFIC PRESS—being the only journal of that class published upon this continent. Issued every Saturday at four dollars per annum.

Address, J. SILVERSMITH,  
SAN FRANCISCO.

## MUSIC! MUSIC!! MUSIC!!!

A. KOKLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise.

Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c. &c.

Light's New Patent Insulated Iron Frame is put into all of

Lighte & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

A. KOKLER, Agent.

## CORN AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skillful and scientific Professors of Philadelphia, and having made this branch of surgical science my speciality for nine years, enables me to operate skillfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can recommend you with confidence to the citizens of San Francisco, as one of the most skillful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertions in the new and growing city of the Pacific.

We subscribe ourselves yours,

Rev. W. Stanton, L. L. D.,

Richard A. Vaux,

Dr. Straud, M. D.,

Dr. Loomis, M. D.,

Cleopole Stevens, M. D.,

Samuel Panchot, M. D.,

Walter C. Foster, M. D.,

S. W. Howard, Att'y at Law,

Pierce Butler,

Henry B. Linton, M. D.,

Wm. L. Howard, M. D.,

Philippe Lidy, M. D.,

Myers Davis, M. D.,

W. M. Thompson, M. D., and others.

No. 718 Catharine street—this is to certify that Dr. Kennedy has removed corns and bunions off my feet, which have annoyed me for years. He also removed a cancer from my middle finger, which I had no use of for a period of six months. I cordially commend him to the suffering humanity of Philadelphia as a skillful surgeon.

MRS. J. W. HAMMOND.

## REFERENCES:

John Corbett, M. D.,

Capt. McClure,

Wm. H. Mills, Jr.,

Rev. Walter W. Stanton, L. L. D.,

Samuel W. Howard, Att'y at Law,

Cleopole Stevens, Pharmacist,

Mrs. Smith, Greene street,

Mrs. W. L. Howard,

Walter O. Foster, Com. Mer., Third st.,

Myers Davis, Market st., above Fifth,

Major Comstock,

Mrs. W. Patridge, Walnut street.

From Dr. W. L. Stevens: Dr. Kennedy has operated upon my feet, and has effectually cured me of some torturing pests that I have been annoyed with for years.

From the Rev. Walter M. Thompson: This is to certify that while sojourning in Philadelphia, Dr. Kennedy has operated on three of my family to my entire satisfaction.

From the Hon. Wm. M. Thorn, ex-member of the Ohio Legislature: This is to certify that I called on Dr. Kennedy to operate on my feet: He displayed great skill as a surgeon, and I am satisfied that he has effectually cured me of those torturing pests which have annoyed me for many years.

From Geo. F. Omerly, 637 Arch street: This is to certify that I called on Dr. Kennedy. He has operated on my feet to my entire satisfaction. au21





A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI. SAN FRANCISCO, SATURDAY, DECEMBER 6, 1862. NO. 6.

MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

#### The Mining Interest!

Will find it of great value as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

#### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

#### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

#### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

#### Terms.

To mail subscribers:—Four Dollars per annum.

#### Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 50.

Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

W. B. EWER, Publisher,

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

#### Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent Right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

**THE FATAL COLOR.**—The present war is teaching the nations many things both new and strange. Many of its lessons are great with present importance, as for instance the introduction of iron armor for war vessels and the vastly increased weight and effectiveness of artillery now brought to bear, etc. There are other lessons which it is teaching, of minor present importance, but which to the observing mind, are not to be passed over, as things of too trivial import to be heeded in this age of rapid progress. Among the latter lessons may be enumerated a large class of facts having a bearing upon the sanitary condition of soldiers in the field and hospital—to one of which, only, we would now allude, by copying from the N. Y. Journal of Commerce, the following paragraph which appears in that paper under the head of "The Fatal Color."

In this age of Minie rifles, telescopic sights and sharpshooters, it will not do for our soldiers to wear red. Of all the colors that is the very best to "draw a bead" on. An aim which might be uncertain at a green, blue gray or neutral tint, becomes fearfully exact when it is brought to bear on a flaming red target. The fate of those two fine, daring regiments, the New York 5th and the Brooklyn 14th, of which red is the distinctive color, proves this. Each of these regiments is reported to have lost far more than its proportion of men in every engagement. About three fourths of the casualties among them are said to be in the red-trousered less. After the battles of South Mountain and Antietam, the Brooklyn 14th, mustered less than fifty men. If the Zouaves could show a larger number, that is because they have been more recently recruited. The brave men of these two regiments would probably vote unanimously to retain the fatal uniform in which they have won their reputation. But their safety, and that of all other regiments of the red order, demands that red trousers, red coats, red shirts, and red caps, should not be allowed on the field of battle.

**INTERESTING IRON EXPERIMENT.**—A simple illustration serves to show a very important fact connected with iron, viz: extreme elasticity, which yields to a force almost incredibly feeble.

Make a hoop of one inch square bar-iron, about the size of the brim of a man's hat; let the inside of the hoop be made quite smooth and true. On examining such a hoop, it would appear that the power even of a horse could in no way alter its shape or form, provided the strain be put to it fairly and equably. Now make a rod of iron of the thickness of a lead pencil, that shall exactly fit the diameter of the hoop, so that, when placed in the hoop it will not fall out unless the hoop be altered in shape. If, acting in a similar way, we take a child's wooden hoop with a stick across it in the centre, and then press it at the sides opposite to that of the cross stick, the hoop will assume an oval shape, and, of course, the cross stick will fall out. Just so does the iron hoop described, act; when any one presses it, the iron rod falls out, showing clearly the elasticity of the iron. The hoop will become oval shaped with a very little pressure not greater than that which can be exerted by a young girl.

**A WHISTLING OIL WELL.**—A novel incident, says the Philadelphia Ledger, occurred on the McClintock Farm Oil Creek, recently. That portion of the tubing of the Van Slyke well which runs into the receiving tanks from the well, was removed in order to make some repairs, leaving the conductor pipe still in the well. Next morning the inhabitants of that region were startled by the sound of a gigantic steam whistle, and found that it proceeded from this well. The gas forced up through the pipe had probably met with some obstruction, which caused it to perform in this way. The scream of this whistle was tremendous, and could be heard several miles.

**THE GREAT THEATRE OF EPHEBUS.**—The great theatre of Ephesus has recently been examined and measured. It must have been the largest ever erected. Its diameter was 660 feet—40 feet more than the major axis of the Coliseum. Allowing 15 inches for each person, it would accommodate 56,700 spectators. Drury Lane Theatre (London) will contain only 3,200, and old Convent Garden held 2,800. This edifice was the scene of one of Apollonius' miracles; it is memorable for the uproar described in Acts XIX., when the Ephesians accused Paul and the Christians in this building. To this edifice the writer to the Corinthians alluded, probably, when he said: "If, after the manner of men, I have fought beasts at Ephesus, what advantageth me?"

**STABILITY OF WATER.**—We cannot any longer sustain the ancient faith in the stability of the "terra firma," as contracted with the ever changing nature of the sea. Recent discoveries have proved, on the contrary, that the land changes and the waters are stable. The ocean maintains always the same level; but, as on the great continents, table lands rise prairies sink, so does the bottom of the sea rise and fall. In the South Sea this takes place alternately, at stated times. To such sinking portions of our earth belongs among others, New Holland. So far from being a young land, it is on the contrary, with its strange flora, so unlike that of the rest of the world, and its odd and marvelous animals, an aged dying island, which the ocean is slowly burying inch by inch.—*Stray leaves from the book of Nature.*

**FALLING FROM ALOFT.**—The New York Times, in an article on seamen falling from aloft, remarks:

We doubt if any one is aware of the number of seamen in our merchant service, whose lives are annually sacrificed in this way. It is a brief record and attracts no attention, which appears in the marine reports every morning—that on such a day, a seaman fell from the jib boom or the top-sail yard of the fine packet ship Blowhard, and was lost. Yet we venture to say that not less than a thousand seamen fall from aloft on Amer can ships every year, while in the discharge of their duty, and perish, unknelt, uncoffined, and unknown.

**VOLCANO NEAR ROME.**—A Roman journal states that something like an incipient volcano has made its appearance near the Civita Vecchia railway, about two leagues from Rome. A committee of Engineers and Geologists have been sent to examine the eruptions of smoke and sulphurous exhalations have been observed. In their report they state that the seat of fire is on the right hand of the railway, at a place called Monte delle Preche. For the space of two hundred square metres the ground is so hot that no one can stand on it long.

**CONFLAGRATIONS IN THE PENNSYLVANIA OIL REGIONS.**—Numerous fierce and destructive conflagrations have from time to time occurred among the oil wells of Pennsylvania the latest of which is thus noticed in a local paper dated, Oil City, Pa., Oct. 8th, 1862.

A terrific fire is raging on Oil Creek, on the Blood & Tarr farms. The oil wells and several refineries are in flames, and a large amount of oil has been consumed. The flames extend over half a mile. The loss is estimated at from \$100,000 to \$200,000. The flowing wells are still on fire. 30,000 bbls. of oil have been destroyed, besides a great many buildings.

**POISONOUS GREEN PAPER.**—Dangerous green paper hangings, stained with arsenical color may be recognized by a very sure and easy test, common spirits of hartshorn, or ammonia. On application of this, the beautiful but dangerous green becomes blue. The danger from these paper hangings is much greater than is commonly supposed. Deaths are constantly being recorded, now that attention has been called to it, which are clearly due to arsenical poisoning from its source.



## Lubricating Fluid.

Few subjects of an apparently simple nature are of more commercial importance than the discovery of some suitable and reliable material for the proper lubrication of machinery and some self-acting machine or instrument which shall properly feed such portions of machinery, as from their condition, require a regular and constant supply of lubricating fluid.—With regard to the fluid to be used, many preparations simple and compounded, patent and otherwise, have been offered to the public.

Mr. F. W. Perrott of Walworth, England, has recently patented, in that country, an invention which, after much experience, he thinks appears to meet the end desired a little nearer than any thing else yet produced. He uses a mineral preparation which consists of micaceous iron ore, in combination by preference with oleaginous and fatty matters. Micaceous ore is a species of hematite, found in various parts of the world. The proportions he uses are for one sort—ore 7 parts, oil and tallow combined, 1 part. The tallow is first boiled, and then the ore, which must have been carefully washed to free it from grit, is stirred in and mixed with the tallow, to which the oil is added. Another sort is composed of ore,  $6\frac{1}{4}$  parts; tallow,  $\frac{1}{4}$  part; oil,  $\frac{1}{2}$  part; and a third kind—ore, 5 parts; tallow,  $\frac{1}{8}$  part; oil,  $\frac{3}{8}$  part. The first is strong, the second medium, and the third a thinner and finer quality.

Mr. Leroy, of Paris, France, another eminent practical machinist, recommends a composition made up as follows: Tallow 252 parts; good lubricating oil, 333 parts; soda, 14 parts; potash, 12 parts; and water, 389 parts. The potash is first dissolved in the water, the soda is then introduced, and, finally, the oil and tallow are kneaded with it.

Messrs. Huck & Lambert, of this city, also make a very superior article of lubricating fluid, designed more particularly for heavy bearings—such as heavy teams, etc. It is produced by a chemical combination of suitable oily substance, purified by distillation, and carefully freed from all resinous, or pitchy matter which tends to gumming. The chief peculiarity of this article is its great consistency—not being attended by any ordinary exposure to the sun or any moderate artificial heat—its liquifying point being 200 degrees. Its tendency is to adhere closely to the axle and keep it cool, in a hot sun, where other materials would become heated and run or wear off.

The obstacles to good lubrication—hot bearings, the gumming of different oils, continual waste and its necessary lack of cleanliness, the constant attention required, great cost, and others which might be enumerated are all involved in the mode of lubrication generally employed. The gumming is as often occasioned by an excess of quantity, as by the impurity or inappropriateness of the material used. In order to obviate the excess of quantity and ensure a regular supply, an ingenious mechanic in England has recently invented a simple instrument which may be attached to almost any machinery, and which is described in the London *Mining Journal* as follows:—

A simple tin box contains the lubricating matter, of which we have so many descriptions for all sorts of purposes. The box is furnished with an axle running its whole length, supplied with as many cups as there may be journals or bearings to lubricate. At one end is fixed a small cog wheel, which is caused to rotate by a small crab-pin resting against an eccentric. The quantity contained by the cups as they rotate can be determined by a small screw inserted in each, and may vary from 1 drop to 50, supplied to the lubricating tubes, and, once the box filled with oil, no further attention is necessary for from 12 to 24 hours.

The Editor of the Journal adds—

No waste can accrue, as all the oil necessary for lubrication being used up, and no more than is necessary supplied, there is no further waste that must accrue by the use of the best known lubricators, after the lubricating properties have been extracted and made use of. Seeing that by the simple nature of the construction of the instrument it will continue to work while the machinery is in motion, it will suffice to refill the cans every 12, 24, or 48 hours, according to the size of the instrument. It requires no unnecessary attention or constant labor. Any kind of oil may be used, an essential called Feint's oil has been for some months in use by the inventor. This instrument has not yet been brought into public notice, and it is only at the instigation of several friends that the inventor, Mr. Swan, has been induced to register his instrument, and allow the public the opportunity of profiting by his ingenuity. That the cause of the gumming of

various oils is difficult to solve, and depends, no doubt, on a peculiar quality in such oils, the exact composition of which is not yet determined, there can be no question; but that a very great deal depends on the manner in which oil is supplied to bearings, or journal, requiring lubrication there can likewise be no question. We ourselves have seen hot bearings cooled by the incessant application of small quantities of resin oil, generally supposed to be peculiarly subject to the quality called gumming, and certainly not considered a good lubricator. But from what we have seen at Messrs. Haig and Co.'s distillery, Hammersmith, and which every one interested in this matter may also see, little more remains to perfect the present obstacle to lubrication.

**TRIAL OF A STEAM PUMP.**—A trial of Capt. C. H. Harrison's Eccentric Pumps took place on Broadway wharf, in this city, on Friday last. The machine continued in operation for some hours, and its performance was witnessed by quite a number of scientific and curious spectators, all of whom pronounced it a complete success. A very much accelerated speed may be given to the pump over that applied at the late trial; and, of course, the volume of water raised will be in proportion to the speed attained. It is a light pump, and the elevation to which a column of water can be raised is limited, only by the force of the driving power, and the strength of the pipes. This pump has been arranged in three sizes; the first or smallest of which, at ordinary work, will raise seventy-five gallons per minute, the next larger size will raise five hundred in the same time, and the third or largest about three thousand gallons. Of course these amounts may be considerably increased, when occasion requires—provided the requisite power be applied. For mining purposes, where large quantities of water are to be raised from great depths, this pump seems to be peculiarly calculated, as it is simple in construction, compact, light, and easy of transportation.

From a return made to the Surveyor General of the State by the Assessor of the City and County of San Francisco, we compile the following Statistics of the Vegetable and Fruit products of this County for the past Fiscal year:

Apple Trees,	4679,	Peach Trees,	428,
Pear “	2771,	Plum “	196,
Nectarine “	32,	Cherry “	401,
Quince “	71,	Apricot “	50,
Gooseberry Bushes,	1701,	Strawberry Vines,	2589,
Raspberry “	3390,	Grape “	107,

and the following numbers of Live Stock and Poultry during the same time:—

Horses,	735,	Mules,	358,
Asses,	275,	Cows,	5440,
Calves,	621,	Oxen,	50,
Sheep,	3070,	Goats,	414,
Hogs,	7377,	Chickens,	7329,
Turkeys,	274,	Ducks,	3130,
Geese,	800,		

For a County that is nearly all brick and mortar this is a good showing.

**OCBRE.**—It is almost impossible to keep pace with the new mineral developments of the Pacific Coast. The deposit of ochre, recently found at Marines, opposite Benecia, seems to be attracting some attention and may yet prove a valuable find. The *Call*, of recent date, says that a quantity of this mineral was lately placed in the hands of Mr. G. A. Lloyd, a master painter, of this city, who at once pronounced the article fully as good as the earth paint which is exported so largely from Sicily. Without trusting, however, to a superficial examination of that kind, he determined to thoroughly test the packages. The rock (for it is a species of soft rock) was ground up and Lloyd mixed it in the same manner that painters mix the *terra di sienna*. Slabs were procured and a very fine specimen of oak and rosewood graining was produced.

**OPHIR ROCK.**—The float rock, in fact the original croppings taken from the famous Ophir mine, says the *Virginia City Union*, 22d inst., are now being hauled away for crushing at the various mills. Most of that large pile of rock, at first thrown out as worthless, has been crushed and found to pay, and now the croppings are to take their turn. The day is not far distant when much of the rock from other claims, now considered valueless, will be worked and made to furnish its proportion of our daily shipments of bullion. The Ophir, we see, has commenced two new dump piles to receive, we suppose, the first and second class ores, while the third class will probably continue to be thrown upon the old and original dump.

## Musical Artists and the Drama.

The California public is said to be a great patron of the arts and sciences, which in a measure we will verify and attest as being the fact; but that it is possessed of a proper judgment or knowledge of the real merit of an artist is far from the truth. We have been visited by many renowned in their profession abroad, and these have left our shores never to return. And again we have been favored with lesser talent, and because extensive posters puffs, and long-winded editorials, commendatory of such upstarts, heralded them, these have remained and amassed fortunes from a deluded people. Our public is decidedly a peculiar one, particularly for taste and style, for instance: a new nigger-minstrel is announced, and performs before the *elite* in this city; the next day the *Alta* will come out with a criticism on his *debut*, as though he were as great as Formes, or any of the celebrated Tenors, and the minstrel goes on rejoicing night after night. A few who claim to be versed in music will go to see the opera, we will call these the *elite* of our city, and include therein the musical critics of the various daily journals, who like *claqueurs*, applaud before a melody or *recitation* is half finished, thus betraying a vast amount of stupidity and ignorance, besides annoying those sitting beside them. Opera after opera is announced and performed, and no matter how badly put upon the stage or executed, the same commendatory notices appear, and the “able management” (?) eulogized for the great enterprise displayed.

The opera of *Macbeth* has been twice performed, and we confess that since we listened to it in Havana years ago by a talented Italian Troupe, the several leading artists failed not in ringing applause from the writer. Our pity and disgust reached its highest point, when, though informed by bills, etc., that new costumes, scenery, etc., had been added for the occasion, those improvements failed to appear, while several scenes most essential to the work, were omitted, to say nothing of being seated in that dense little box of a melodeon, where the best efforts of artists, either vocal or instrumental, seem not to blend, but rather form a racket of musical and boisterous concord. That “able management” (?) ever ready to cater to the taste of our people, seems to be up with the requirements of a well appointed orchestra. One violin has to do all the tall “fiddling” in that sublimest work of Verdi!—entitled *Macbeth*. The dollar paid we regretted, as did many others. We advise the Bianchi's, if they propose to bring out more new operas, to take the Metropolitan, or some other theater, and appoint an orchestra worthy for the task; the opera can then be successful. When the “able management” bandies for a few paltry dollars with musicians by reducing their wages and similar shortcomings, no success can attend their efforts. S.

**RICH ON PAPER.**—It appears from a recent report of a Committee of the Nevada Territorial Legislature, that from the 29th day of November, 1861, to the 21st day of October, 1862—a period of less than eleven months—one hundred and eighty mining incorporations were formed under the general laws of the state of California to operate on mining interests within the territory of Nevada. The capital stock of these companies foots up to the round number of *seventy-eight millions* of dollars! We have not the means at hand of giving the amount of incorporated capital, organized in that Territory prior to the first above mentioned date, but presume it cannot fall but little if any short of the amount since organized—which would give a total aggregate of at least \$150,000,000, a pretty good capital for a new Territory to begin business with.

**TALC.**—The editor of the *Territorial Enterprise* has seen some very fine specimens of talc obtained from an extensive deposit of this mineral somewhere in the vicinity of Pyramid Lake. This mineral is also found in great abundance near the Humboldt mines, where it is said that it may be obtained in sheets, four feet square! and in unlimited quantities. It has been suggested that this mineral might make an excellent and durable material for roofing. We can see no reason why it might not be altogether preferable to slate for such a purpose. The experiment is certainly worth a trial, and when we get a railroad from this city to the Eastern Slope, if the roofing experiment is found to succeed, it would afford a large amount of return business for the road, and furnish the city of San Francisco with a most elegant, and durable fire proof material for roofing and siding too.



## TO MINING COMPANIES.

We earnestly solicit from mining companies and associations the following blank statement, filled according to the data hereby accompanying. The purpose for which we seek this information is important to every citizen and stockholder on this coast; it would also be productive of beneficial results—i. e., inducing capitalists to invest in our mining operations, thereby infusing new life and vigor into business generally in our States and Territories. Little, if anything, is known of our metallic wealth in Europe or the Eastern States, hence we desire as much of the blank filled by you as may be interesting and instructive to the people of this State and those interested abroad.

We know of no mining district in Europe or America where this kind of information is not willingly rendered by parties owning property of this nature; and we know of no better medium for making public the richness of our mines. We shall send blanks to mine and mill proprietors for every quarter, and will gladly publish the contents for the information of the community:

Title of Company and names of officers for the year.	Am't of stock & value per share.	When incorporated

Location.	Average assays of ore.	Process employed and number of stamps.	General remarks.

PALMER, HANSCOMB &amp; CO.,

**Golden State Foundry and Machine Works,**  
First Street, near Market, San Francisco, Cal.

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications. Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast.  
San Francisco, November 29, 1862 3m

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 ACRES, HAS RECENTLY been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect. For further particulars apply to  
HARVEY S. BROWN,  
No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office, no 13 6mo

## DEETKEN'S

Chemical and Metallurgical Works,

ON SAN BRUNO ROAD, ISLAIS CREEK,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov8-3m

JULIUS SILVERSMITH,

COMMISSIONER FOR NEVADA TERRITORY.

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery &amp; Washington sts., Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE WHO HAVE BUSINESS relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

W. T. &amp; J. GARRATT,

CITY

**BRASS & BELL FOUNDERS,**  
Cor. First & Market sts., opp. Oriental Hotel,  
SAN FRANCISCO.

BABBET METAL CASTINGS, FIRE ENGINES, FORCE AND LIFT PUMPS, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS OF ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."

LEANDER RANSOM,  
CIVIL ENGINEER  
AND SURVEYOR,

Having been connected with the public surveys of the State of Ohio for 20 years, and the public works of the State of California for 7 years.

## ALSO, STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF THE STATE SCHOOL LANDS,  
At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash, and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct 3m

AGENCY FOR PATENTS.—The undersigned having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)  
REAL ESTATE AGENT,  
410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, LOANS NEGOTIATED

**Washoe Stock Exchange,**  
N. E. cor. Montgomery and Merchant sts.,  
SAN FRANCISCO.

L. W. NEWELL &amp; CO.,

Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.  
sep20

THEODOR KALLENBERG,  
MAKER OF MODELS  
for Inventors,

MACHINES, MATHEMATICAL Optical and Philosophical Instruments  
Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps.

Repairing of Machinery promptly attended to. au7.3m  
(No. 4 Sansome street, corner Market, San Francisco..)

DEVOE & CO.'S  
STEAM ENGINE

—AND—

## MACHINE WORKS,

Corner Market &amp; Fremont streets, San Francisco.

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILL  
Mills, Flour Mills, Quartz Mills, etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT  
Cutting

AGRICULTURAL MACHINERY of all kinds made and repaired.

Duplicate parts of Threshing and Reaping Machines and  
Thrashing Teeth made to order, on the most reasonable terms.

Steam Engines and Boilers constantly on hand, and for sale  
cheap. Screw-Cutting Turning Lathes for sale. DEVOE & CO.  
jul3

## LATEST IMPROVEMENT

## In LADIES' BUCKLES.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS  
State, as well as to Jewelers and dealers in Jewelry, that he has made  
important improvements in BUCKLES, which surpass any and all heretofore  
made. Their simplicity, commodiousness, and beauty render them the  
most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or  
address,  
FREDERIK REICHEL,  
Manufacturing Jeweler,  
620 Merchant street, San Francisco.

sep11

THE  
NEW ENGLAND SEWING MACHINE for \$25!

THIS MACHINE stands confessedly at the head of everything now before  
the public. In cheapness, neatness, compactness, durability and beauty,  
it has no rival. It is made with special reference to the wants of a family,  
and any one with the aid of the printed directions can learn to work it  
successfully in a few hours. It will work from leather to the finest cambric  
without the change of needle, tension, or feed. It gives the best satisfaction  
where it is sold, and all who use or examine pronounce it better adapted to  
meet the wants of every family than any other machine now offered to the  
public. Gauge and hemmer attached.

Every machine warranted, and kept in order free of charge. This is the  
only cheap machine that will do all kinds of family sewing.

STEWART & SHEAR, General Agents,  
No. 60 Second street.  
sep11

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of  
Deeds for California Virginia City, N. T. my23

THE FOLLOWING GOODS TO BE FOUND AT  
H. D. PEARCE'S:

Gents' Heavy Gold Cases, different patterns;  
Ladies' Heavy Gold Cases, do do;  
Gold Telescopic Pen and Pencil Case;  
Extension Screw, Heavy Silver, for Gents';  
Extension Screw, Heavy Silver, for Ladies';  
Silver Extension Cases;  
Silver Telescopic Cases;  
Screw, Silver and Ebony Desk Holders;  
Slide Silver and Ebony Desk Holders;  
Reverse Silver and Ebony Desk Holders;  
Pen Holders, Silver and Ebony;  
Pen Holders, Gold and Ebony;  
Pen Holders, Gold and Ivory;  
India Rubber Propelling Pen and Pencil Cases  
India Rubber Propelling Pencils, short.

All the above goods are made to order and warranted; will be sold  
cheap for cash. There are some thirty different patterns, leaving an oppor-  
tunity for parties to select and be suited.

A cheaper class of Pens direct from New York, at wholesale only.

Gold Pens constantly on hand. Gold Pens repaired.

H. D. PEARCE,  
606 Montgomery street, between Clay and Merchant, up stairs

GREAT REDUCTION  
IN PRICES.

STANFORD BROTHERS,

121, 123 and 125 California Street,

KEEP THE LARGEST STOCK OF ALL KINDS

OF

Lamp Stock,

And will Sell Cheaper than any House in this State.

LAMPS,

CHIMNEYS.

WICKS,

CAMPENE,

BURNING FLUID,

ALCOHOL,

TURPENTINE,

COAL OIL,

KEROSENE OIL

## COMET ILLUMINATING OIL.

SPERM OIL,

LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL

LINSEED OIL, Raw and Boiled,

POLAR OIL,

SHARK'S OIL,

NEATSFOOT OIL,

TANNER'S OIL,

&amp;c., &amp;c., &amp;c.

Our customers in particular, and the country trade generally, are requested  
to ascertain our prices before purchasing from traveling agents, as we will  
sell at less rates than they can afford to. ap16fr

## PHILADELPHIA BREWERY,

Second street, corner of Folsom, SAN FRANCISCO, CAL.

Hölscher, &amp; Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave  
to apprise at the same moment our many friends and patrons that the  
above well known Brewery has been permanently located in our new prem-  
ises, on Second street—the former residence of Capt. Folsom where we shall  
endeavor to continue in furnishing our numerous patrons with the best ar-  
ticle of "Beer." We shall strive to perpetuate the good reputation for  
promptitude and the faithful execution of orders as heretofore, and there-  
by increase our custom,  
Nov9.

## FULTON FOUNDRY AND IRON WORKS.

HINCKLEY &amp; CO.,

MANUFACTURERS OF STEAM ENGINES,  
Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings,  
Mining Pumps, and all kinds of Machinery,  
Amalgamators, Etc., Etc.

47 &amp; 49 First Street,

BET. MARKET AND MISSION, SAN FRANCISCO

ALL kinds of Iron and Brass Castings furnished at short notice. Every  
style of finishing to iron when cast. Repairing to Machinery neatly done  
Pattern Making in its various forms.

D. B. HINCKLEY WM. E. WORTH. WM A. FIELD

## SQUARZA'S PUNCH.

HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff street, near Sacramento st.

Branch at 406 Montgomery street. my30

A. S. ROSENBAUM & CO.—Importers of pure Havana Cigars, Tobacco,  
etc., corner Clay and Battery, 25 and 27 Cedar street, New York.



# Mining and Scientific Press.

W. B. EWER, Editor.

SATURDAY ..... DECEMBER 6, 1862.

The MINING AND SCIENTIFIC PRESS is published at the Federal Building, Room 24, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance. Advertisements, Fifty Cents per line. A liberal discount made to quarterly advertisers.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## Practical Science Indispensable to National Progress.

"Science and information are the joy and justification of mankind. They form the springs of a nation's wealth, being often, indeed, substitutes for those material riches which nature, in many cases, distributed with so partial a hand.—Humboldt.

A more important truth was never penned by the great German philosopher than the one above quoted. It is a truth which should be converted into a living faith in the minds of all who have a heart interest in the material development and national progress of the country of their birth, or of that land which they call "home." It is one of the great faults of our political system that, with us, Government seems to lose all sight of its obligations to provide cheap and universal education after it has carried the child through a course of primary instruction in our common schools. With the exception of a little stinted assistance, now and then, to some Collegiate Institution, where the dead and dying languages, and the mere theories of science are taught to a limited extent, government, in this country, both state and national, seems to conclude that it has fulfilled its educational duties to its adult population. There is not a leading state in Europe which is not far in advance of this people in the practical acknowledgment of the importance of providing intellectual training for those entrusted with the great mercantile, mechanical and manufacturing interests of their several nationalities. The evidence of this may be found in the large endowments and appropriations constantly being made by foreign governments in support of institutions and publications connected with industrial science.

There never was a period when a union of skill and science was so much needed by the nations of the earth as at this present time—there never was a people to whose national advancement universal practical science would add such an impetus as to our own, and among our state organizations not one other of all the number would derive a tithe of the benefits which would accrue to California from a universal diffusion of such information as would combine science with its practical application to the development of the varied resources, mineral and agricultural, of our state.

It is true and "pity 'tis 'tis true" that practical science has not yet reached its just position, in public esteem, with any people. It was a knowledge of this fact that brought out the happy expression already quoted from Humboldt, who again writes—"An equal appreciation of all parts of knowledge, is an especial requirement of the present epoch, in which the material wealth and increasing prosperity of nations are in a great measure based on a more enlightened employment of natural products and forces."

The time has been when a nation's prosperity was founded almost exclusively upon local advantages or accidental combinations. In the incipient progress of England's greatness the occurrence of coal and iron within her borders, to an extent nowhere else known at the time, served as a foundation for a progress in manufacturing art which, at one period, promised to make and continue her as the overshadowing power of the earth. At that time immense tracts of fertile land, and a genial atmosphere pointed out this country as the future granary and staple producer of the world, while the still more genial climes of France and Italy seemed to give those countries the exclusive control of the production of silks and wines.

Had not the struggles of science in the 16th century suc-

ceeded in freeing itself from the trammels of an ignorance that would have laughed Columbus out of the effort which gave to Europe a new world, and deprived Galileo of his liberty for presuming to assert that the earth revolved on its axis, each of these countries, even to this day and a century hence, might have continued in the dull routine, which, according to the theory of the day, nature designed them.

But science, in its progress and practical adaptation to industrial pursuits, has of late produced a wonderful transition in human conceptions, and is now teaching the nations the important lesson that they must acquire and maintain their respective levels by the force of their intellectual developments, instead of resting in security upon the natural developments of soil and climate. It has now come to the knowledge of mankind that that people which is most liberal and earnest in the intellectual development of its working and producing classes—of its artisans and mechanics—is destined to override all local advantages and leave far in the rear, in material progress, all other peoples, who attach less importance to the intellectual development of their adult population. Even a superabundance of capital, or the possession of inexhaustible mines of the precious metals, if unaccompanied with intellectual training, will be without avail to save a people from becoming laggards in the modern march of national progress.

Neither the highest order of "common sense" nor the most abundant gift of "Yankee shrewdness" will avail a people unless her "sons of industry" become the earnest disciples of practical science. Practice and science must henceforth go hand in hand, or a general emigration of the former will soon leave the laggard people who reject the union in a slough of national despondency.

We have said enough, if, indeed, it were necessary that anything should be said to awaken our newly elected legislators, and all others having influence or power, to the importance—to the indispensable necessity—that the people of our country at large and those of this state in particular should have the means placed before them for the acquirement of practical, scientific information—each one having a reference to his own particular calling in life, whatever he may have chosen. The miner needs his "School of Mines;" the farmer his "Agricultural College;" the merchant his "Mercantile Academy;" the mechanic and artisan each need their appropriate fountain heads of instruction, and those who go down upon the sea in ships, who carry our manifold products to the ends of the earth, and defend our flag upon the highway of nations, need also their "Schools of Navigation." As surely as night follows day, so surely, unless our people demand and secure additional facilities for practical science to those which now exist, will our people fall, early, into the sere and yellow leaf of decay. Nothing else, as we have already said, can save us in the modern march of material progress wherein other nations are endeavoring to outstrip us by the superior intellectual advantages, which they are placing within the reach of their peoples. The terrible dangers and awful forebodings which now hang over our national existence, betoken less real danger to the Republic than does the apathy and indifference manifested by our people with regard to the subject which we have been considering, and which we propose to still further discuss in future numbers of the Press.

## THE GRASS VALLEY (NEVADA Co.) SILVER MINES.

During our recent trip to Grass Valley, we paid a visit to what are now pretty extensively known, throughout the state, as the "Grass Valley Silver Mines." We were accompanied on the visit by our excellent friend PHIL. ROBERTS, one of the proprietors, and one who is, if not the first discoverer, at least the chief pioneer of these mines, and one who has done as much or more than any other person toward their development. The mines are located about six miles, almost due East from the town, in a very wild, romantic region, and near the banks of Greenhorn Creek, from which stream the first company located took its name.

The mine is located, according to the best of our recollection—for we did not notice particularly at the time of our visit—in a region of talcose slate. The direction is nearly N. W. and S. E., dipping east, very winding, but easily traced, by surface croppings, about 3000 feet. The only companies which have yet struck the vein are the GREEN

HORN, 1200 feet, and thence, running south, the CENTRAL, 600 feet and the MONROE, 1000 feet. The next company, south, now known as the Potosi, but which, we understand, intends to change its name, have run a tunnel into the hill about 150 feet, but have not as yet struck the lead.

Below this company we understand that a company, known as the Buffalo Co., have located a set of claims, and commenced work. We learn that they have already struck a heavy ledge, with good indications, which is thought to be a continuation of the Monroe Lead.

The Monroe company is the only one which has been incorporated. They have ten or twelve men now at work, getting out ore, under the direction of Mr. D. C. Odell, and are working in two shafts, and also running a tunnel, commencing at the lower extremity of their ground. This tunnel will drain the upper portion of the mine fully 150 feet. This company was the first to secure a working prospect for the mine. One of the proprietors, Mr. G. C. King, sent down some 1900 lbs. of croppings, in July last, which were reduced by Bradshaw & Co. of this city, who returned a result of \$42 in gold and \$53 in silver. The rock crushed at their mill, hereafter mentioned, was taken from near the same locality. About 100 feet from their lower line a cross vein appears, which presents quite as favorable an aspect as the true vein, which latter does not appear to have been at all disturbed by this apparent intruder. The company has leased a mill which will be more fully alluded to at the close of this article, and when we were there had about 50 tons of rock on its platform.

On the Central company, nothing was doing so far as we were informed. A tunnel was driven up to the vein a short time since, from a neighboring ravine. We are not advised as to what their intentions are for the present season; but they will, in all probability, soon undertake active operations, as their mine, lying between two others known to be rich, must, beyond a doubt, be valuable.

The Green Horn company, which is made up chiefly of Grass Valley men, was the first located and has thus far proved the richest of the three, gold being its chief return. It is from this ground that all the gold specimens, which first brought this mine into special notice, were taken. Two pockets have been struck, the first in September, which yielded about \$3000 in specimens, the last in November, yielding about \$400. This mine is also well located for working. About 120 tons of rock have been taken out and a very comfortable board cabin built during the past two or three months, all at an expense of about \$350. "PHIL" however, has a peculiar way of making a little money perform a large amount of work. The mine, when we were on the ground, was worked by an open cut about 40 feet in length on the line of the vein, which is very heavy, averaging, throughout this cut about four feet in thickness. Since that time a short tunnel has been commenced, from which rock will be taken during the winter. When the Monroe company's tunnel shall have been driven up to the south line of the Green Horn claims it will drain their present workings to a depth of about 300 feet, and the upper portion of their ground fully 600 feet.

Several other "extensions," than the ones named, have been staked off and recorded—among them we believe are the Green Horn, No. 2, and the Chicago. Of course the excitement connected with the successful opening of this mine has attracted to the neighborhood large numbers of prospectors, by whom "all the region round about" will be thoroughly prospected, and perhaps other equally rich or richer leads will soon be developed. The neighborhood of these mines is an exceedingly rough one—very forbidding in appearance to the prospector, well wooded, and one which until the present time has been but little examined.

## THE REDUCING MILL AND ITS MACHINERY.

Subsequently to our trip to the mines we paid a visit to the Monroe Co.'s mill, accompanied by one of its proprietors, Mr. G. C. King, by whom we were introduced to Mr. S. F. Clouser, the gentlemanly superintendent. The mill is located in Boston Ravine, about half a mile east of the main town of Grass Valley, and has long been well known thereabouts as the Empire Mill. The mill has been leased for a short term with the privilege of purchasing on extremely favorable terms. Of course the unexpectedly rich development of the mine will determine the company to avail itself of its privilege to purchase. It is the intention also of the company to remove the mill, early in the spring, to the



mine, where a location has already been selected, and where an abundance of employment may be found for the same. This mill has eight heavy stamps, to which four more will probably be added, and is driven by a very superior 60-horse power engine. The amalgamating pans now in use are what are known as the "Knox pans," heated by steam chambers. The chemical process employed is that of Smith & Dewey—the same which is used at the Ophir works in Washoe.

The first "clean up" was made on Saturday of last week, after one week's run, with a result, which greatly delighted and surprised every one interested in the success of this new enterprise. The Green Horn company had a little short of 20 tons of rock crushed, and took out two bricks valued at over \$4000—upwards of \$200 per ton! and this rock, we know from careful inspection was from the most unpromising portion of the pile lying at the vein! This clean up was mostly gold, there being merely a trace of silver. The result in that respect was what was expected. The rock which the company is now taking out, and which will enter into the next crushing, contains a large amount of silver with the gold.

We have not learned either the amount of rock crushed or the mineral taken out from the Munroe company's claims. The bricks from their "clean up" are silver bricks, containing, we believe, considerable gold, but their value cannot be ascertained until the metal is parted. The result is, however, quite as satisfactory as that from the Green Horn, and with many, more so, from the undoubted fact that that portion of the mine is unquestionably silver ore, and hence more reliable than any gold mine. The Green Horn is located about 300 feet higher than the present workings of the Monroe, and our impression is that when the former is worked to the same level with the latter, both will prove to be valuable silver mines, and fully establish the fact that we shall not hereafter be obliged to go to the Eastern Slope to find silver. We shall watch with considerable interest the future development of these mines.

#### COPPER MINING IN CALIFORNIA.

Copper mining has already become one of the features of California, and is evidently destined, at an early day, to employ a large amount of capital and form one of the chief mineral products of the State. From every direction we are in the constant receipt of intelligence of new discoveries and the successful workings of already developed leads. The large pile of copper ore which has been lying upon the sidewalk in front of Duncan & Co.'s, on Montgomery Street, for the past week or ten days, affords the most abundant evidence of the value of the recently opened mines in Calaveras county. The ore alluded to is from the Napoleon mine, situated about thirty miles east of Stockton, in Calaveras county. Quite a little town is growing up about this mine, which, in anticipation of its future importance has been christened Napoleon City.

This company effected its first sale of ore a few days since, to an English House, which is represented in this city by Mr. William Shiels. The quantity sold was 100 tons, including, we presume, the lot now on Montgomery Street.—This ore is bought by assay, and will be shipped to Swansea, for reduction. The mines at Copperopolis, a few miles southerly from Napoleon city, are already well known, and have for several months past, been raising and shipping large quantities of very good ore. The ore thus far raised in California is supposed, by persons well versed in copper mining, to be of a quality quite inferior to that which will be found at greater depths than have yet been reached in any of our copper mines.

#### COPPER IN MARIPOSA.

Rich copper ore has also been recently discovered between Coulterville and the Merced river, in Mariposa county, which assays a very satisfactory percent of copper, besides a valuable percentage of silver and gold. A company, composed chiefly of Sacramento capitalists, with a capital of \$300,000, has already been organized to work the same. It is said that they will shortly have a hundred men at work upon the mine. The existence of this vein of copper has been known for several years, but serious attention was never attracted to it till since the late important copper developments in Calaveras county. There are no doubt many other known deposits of a similar character, in other parts of the State, which need only to be brought to the attention of parties properly versed

in copper mining, in order to lead to their early development. As we write we notice a paragraph in point in a late issue of the Nevada Democrat, which we condense as follows:—

#### COPPER MINING EXCITEMENT IN NEVADA COUNTY.

It seems that the vein was discovered about a year and a half ago on a ranch near the Zinc House in that county.—The owners had employed a man to sink a well on the ranch, who after going down a few feet, came upon a hard rock or mineral; he abandoned that place, and dug another well at a distance of fifteen or twenty feet from the first, where he struck the edge of the same vein and threw out a considerable quantity of the mineral. A specimen of the ore was brought to Nevada and assayed, and found to be rich in gold. The proprietors of the ranch took the vein, and in connection with others, worked it as a gold mine, but from some reason it would not pay, and the enterprise was abandoned. One of the proprietors afterward removed to Amador county, and seeing some of the copper ore there, was struck with its resemblance to the ore in his supposed gold mine. He wrote to his partner still on the ranch to send him a specimen of the ore, which was assayed in Amador, when it was ascertained that it contained a large percentage of copper. The Amador partner immediately returned to Nevada county and re-located the lead as a copper mine. These facts, says the Democrat, becoming known, numerous other parties repaired to the locality, where hundreds are prospecting, and locating every rock that looks as though it might contain copper. A number of veins have been found which evidently contain copper, and we shall soon know whether any of them are likely to prove of value.

#### THE DEL NORTE COUNTY COPPER MINES.

A party of scientific gentlemen recently visited this copper locality for the purpose of giving the recently discovered mines in that region a thorough examination. They returned on the last steamer from the North, fully impressed with a belief that the importance of the mines can scarcely be exaggerated. Among the number (we quote from the Herald of this city) was Mr. Price, a Welsh geologist and mineralogist, who recently came out to this country with Mr. Sheil, a shipper of copper ore for the English market. He has for many years been connected with the extensive smelting works at Swansea, and has therefore a practical knowledge of copper ore. He thoroughly examined the copper region and made more than one discovery of as great importance probably as any hitherto made. Mr. Price and his companions had every facility offered to them for investigation by the residents, and his opinion will not fail to have great weight with persons who are interested in property in Del Norte county. Mr. Stearns and other geologists of eminent ability have also visited the county, and they concur with Mr. Price in opinion.

The Panama brought 5,100 pounds of ore from the claim of the Excelsior Company, of which our fellow citizen, Mr. Fay, is President. Within a year from this time, Del Norte will be classed among the most valuable mineral regions of the world.

#### COPPER IN PLUMAS.

Some eight or ten months since a copper ledge was discovered by Messrs. Procter and Cooper, Genesee Valley, Plumas county. The ore, which is said to contain a large per cent. of copper, is very heavy, and somewhat resembles coal. A company has been organized for working the mine, and in another season works will be erected upon the premises. About 16,000 pounds of the ore have been taken out, which will be sent to Boston for the purpose of being tested.

#### COPPER SHIPMENTS.

The ship Regulator sailed from this port on the 21st ult., for Boston, with about \$30,000 worth of copper ore from the Copperopolis (Calaveras Co.) mines. Copper ore has now become a regular article of export from San Francisco. About half a million dollars, in value, from Calaveras Co., having already been sent forward. It is time that our Capitalists were casting about to devise some means for securing the business of extracting the metal from this ore within our own State. Present appearances indicate that the supply will soon be sufficient to warrant the necessary outlay of capital for the erection of works and concentration of skill, which shall make California independent of the world in this particular.

#### Mining Stock Report.

SAN FRANCISCO, Dec. 5th, 1862.

There has been more than usual animation manifested in the Mining Stock Market during the past week. The leading shares have advanced heavily and low priced stock has changed hands very freely.

Ophir continues to steadily advance. Sanborn's Circular quotes one sale of 60 shares (4 feet) at \$3,500 per foot, 15th January. Sales have varied during the week from \$2,500 to \$3,500 per foot—a wide margin for a well established, dividend paying stock. Buyers are still basing their operations somewhat on the expected dividends for last month. 477 shares changed hands last week.

Gould and Curry is steadily advancing. The quotations for the week have run from \$2,500 to \$2,550 per foot—\$2,700 is generally asked. One sale of 20 shares is quoted in the Circular at \$2,500. It was sold at the Board for \$2,525. There are more purchasers than sellers in the market. California is quoted at \$1,100. No transactions. Market quiet.

Chollar still rests quiet, with small sales at slightly advanced rates from previous quotations. It is firm at \$275—\$280 asked. Sales have been made at \$280.

Potosi has been but little enquired for. Small transactions are quoted at from \$75 to \$80—an advance of \$10 over previous quotations.

North Potosi is quoted at \$8—offered at \$10.

Sierra Nevada is quoted at from \$75 to \$80. 140 shares changed hands last week.

Danely is quoted at \$100 bid—200 asked. A slight falling off.

Burning Moscow. But little has been done in this stock during the past week. Sanborn's Circular quotes it at from \$60 to \$65. It sold at the Stock Board, on Tuesday, for \$67. Important improvements at this mine, elsewhere alluded to, will probably soon exert a favorable influence on its stock. Mount Davidson is selling for \$5 50—\$6 asked. A slight advance.

Meredith is quoted at \$15 to \$20—a slight advance.

Burnside is quoted at \$25 to \$30—An advance of \$5 over last week.

Iowa quoted at \$140 to \$150. An advance of \$10 per foot.

Norton quoted last week at from \$12 to \$15, has since been sold at from \$25 to \$30—an advance of 100 per cent. A paragraph in another column, in relation to this mine will fully account for this sudden advance.

Sacramento is quoted at \$25—\$35 is asked.

Hazel Green is mentioned in the Territorial Enterprise, Nov. 28th, as entirely without demand, with a large amount of stock in the market. The latest sale was Nov. 21st—50 feet at \$3 50.

Lucerne is quoted from \$5 to \$8.

Hale and Norcross is quoted at \$250 but \$275 asked. No sale reported.

Rogers quoted at \$22½ bids—\$25 asked. \$5 assessment.

Lady Bryan \$3 bid—no sales at stock board.

#### Washoe Report.

Speculators have been for some time lying back for men of small means to freeze, by the approaching winter, into selling their "feet" at small figures. The continued mild weather, however, has thus far sadly interfered with their calculations. The biters are in a fair way of getting bit. As a consequence stock transactions have recently been small and slow.

The Enterprise, in its stock report of Nov. 26th, says:—The controlling interest in several outside claims, we are informed, has been quietly bought by capitalists in San Francisco, who intend to perfect a speedy development of these mines.

The same paper of Nov. 28th says:—The Santa Rita, have brought suit against the Cole Company for purpose of silencing the dispute against their title. The stock of this company is held firm at \$50 per foot, without sales. With an unclouded title, the stock would read at much higher figures.

The Sacramento have sued some eight different companies on Cedar Hill to quiet title. This company to-day shipped a couple tons of first class rock from their mine to San Francisco, in order, they say, to fairly test its richness. The Enterprise intimates that this transaction is mors for display than any real profit which the company could hope to gain by transporting their ore so great a distance for reduction.

Bald Eagle—40 feet reported sold on the 25th ult. for \$4 per foot. Oriental—25 feet sold at \$4 per foot. A large portion of this Company's stock is reported to have changed hands recently at about this figure.

Ashland is enquired for at \$8—\$10 is asked.

Nevada is enquired for at \$7.

The Enterprise's Stock Remarks of Nov. 22 says:—The Ironsides Company (formerly Vermilion Company) are reported to have struck rich rock in their tunnel. Several sales have taken place to-day in that stock at \$5 to \$7 per foot.

Burdell—last quotation, some ten days since, report 15 feet in this company sold at \$15 per foot.

Blomington at \$5.

Cedar Hill Consolidated is enquired for, and could be sold at very low figures—Cedar Hill Tunnel was last offered at \$6.

#### Emerald Stocks.

The Wide West is still advancing, and is quoted at from \$400 to 405.—\$450 is generally asked. This stock has improved about \$20 during the week.

Antelope is quoted at \$70—with \$85 to \$100 asked.

Atlas is quoted at \$5 and \$8 is asked.

Silver Hill is not quoted this week.

Utah has no buyers—held at \$40.

Real Del Monte quoted at \$12 with \$15 asked.

#### Coso Stocks.

The Josephine, Coso and Willow Springs are the best known Stocks in this district—but no recent transactions have been made in either of them.—The former is held at \$20. No offers are quoted for either of the others. The Josephine had bidders, the past week, at the Stock Board at from \$15 to \$16.—Holders asking \$20 to \$21.

Coso—No bidders at the Board—\$20 asked.

Willow Springs—no bidders—\$35 asked.

#### Mexican Mines.

St. Nicholas Silver Mining Co. is quoted by Sanborn's Circular at \$100.

Mina Prieta finds no recent buyers, but is held at from \$110 to \$130.

Dios Padre is held at \$45 50.



### The Ophir Company.

At a meeting of the Stockholders of the Ophir Company held at their office, on the 26th ult. it was decided, conditionally, to purchase the interest of the Virginia Company in a vein located a short distance above the Ophir or Comstock vein. The amount agreed upon, we understand, is \$100,000—to be paid in monthly installments of \$20,000.

The Virginia Company, located a few feet above, it will be recollected, have recently set up a title adverse to the Ophir the precise nature of which we have not learned. Whether this claim is considered of any account by the Ophir Company, we know not, but presume that that Company has been, in part, induced to make this amicable arrangement from the fact that whatever the decision might be, at present, another difficulty might arise in the future from the great probability, that as the two claims are dipping toward each other, they may eventually come together. A very perplexing question would then arise as to who held the true vein—as it could not in that case belong to both. Undoubtedly the vein which should be found continuous in dip would be considered, in law, the true vein. The danger to be apprehended is, that under such a decision the Ophir might be the loser. Hence the apparent propriety, of coming to an amicable and full decision in the matter at once, especially when it can be done by the payment of the moderate sum named above.

### Washoe Items.

We condense the following items mostly from the *Territorial Enterprise* :—

**BURNING MOSCOW.**—The Burning Moscow, says the *Territorial Enterprise*, are making extensive preparations for working this mine in an economical and systematic manner. A house has been erected some distance above the mouth of the tunnel in which their engine and hoisting machinery will be put up. Their engine, hoisting apparatus and a large pump are now on the ground. An incline has been commenced in the west end of the new building which will be driven down into the lowest portion of the mine as soon as the hoisting machinery is in readiness for use. They are now going to work in the right manner to work their claim to make a mine of it. A company may dig a tolerably deep and very ugly looking hole, and may for a time keep the water out of it and raise some ore, with no other machinery than a bucket and windlass, but when mining is to be done science, system and machinery are demanded.

**THE NORTON COMPANY.**—The Virginia City Union says the Norton Company have just struck their lead after running a tunnel twenty-five feet into Cedar Hill, and sinking a shaft twenty-feet in depth from the end of the tunnel. Their lead is about four feet in thickness, and the quartz, of a honey-combed variety, is literally studded with pure gold. Very little, if any, silver has been found in it, as yet; but the amount of gold visible is large. Stock in this company has advanced the past week from \$15 to \$30 per foot.

**MALDANADO LEAD.**—The company working this lead, situated west of C street, between this place and Gold Hill, are taking out and heaping up ore which the Spaniards in charge say will pay for crushing. The ore is of a rusty, red appearance re-sembling, in many respects that of the Gold Hill mines. The Bachelor company, adjoining the Maldanado on the south have completed the building commenced by some two weeks since, over their incline, and are now preparing to erect their hoisting machinery, etc.

**MOUNT DAVIDSON TUNNEL COMPANY IMPROVEMENTS.**—The Mount Davidson Tunnel Company are erecting a building at the mouth of their tunnel, just south of where the new Gould & Curry ore house is to be erected. The building is intended as a work shop and tool house, also to shelter the mouth of the tunnel from the storms and drifting snows of winter.

**WATER.**—In early times the great fear of those erecting mills on the various canons of this region, was that they would not afford sufficient water during the Summer and Fall months for the numerous requirements of the works. Every year the volume of water flowing in the ravines has increased. Plenty is now running through all the canons on which mills are located to meet every requirement, and we hear no more of the water bugbear.

**SPANISH NO. 2.**—This company have set up their engine and are very nearly ready to commence the work of hoisting the water from their shaft. They are about ready to commence with their steam hoisting and bailing apparatus.

**PHOENIX CONCENTRATING COMPANY.**—This company are still in full blast at their place midway between here and Gold Hill. They have some six or eight men at work at shoveling the ore into sluices, attending the concentrators, assorting, etc. Some seventy five or a hundred tons of this concentrated ore was ready for removing to the mills yesterday, when we visited the works.

**GENIUS TRIED AND TRIUMPHANT.**—This Play, recently from the pen of our talented California author, Rev. Dr. H. BREN, of this city, is to be produced on the 11th instant, at the American Theater. The plot, incidents, language and novelty of this play will create a reputation for the author that will compare favorably with the most celebrated writers of modern drama. The best available talent has been engaged for the season, and we trust our readers and citizens will pay a just tribute to our Reverend friend who is in every way deserving.

**HOW TO TEST SILVER ORE.**—Pound a small quantity of the rock supposed to contain the metal, as fine as possible, then place it on a shovel, or anything handy, and hold it over a slow fire, to burn away sulphur or arsenic, which are generally mixed with the ores of silver. Then take a cup, or any glass or earthenware vessel, into which pour a small quantity of nitric acid (aqua for is,) in which put about a teaspoon full of the powdered ore, which boil in the acid for a minute or two. Then take some common salt, dissolved in water, in another vessel; pour a small quantity of the salt and water into the acid; if it turns white and looks milky, there is silver in the ore. The above is a cheap, convenient and certain test for silver.

We have given, in another column, a full description of the newly discovered Grass Valley Silver Mines, and the result of the first "clean up" from their mill. This, we believe, is the first silver mill which has been fitted up on the Western Slope, but, we trust, will be the precursor of hundreds. It has already pretty clearly demonstrated one highly satisfactory result—that silver ore can be found about Grass Valley, in paying quantities. Having until recently been a resident of that town for some eight years, we know enough of the energy of her citizens to trust them for the future energetic prosecution of this new branch of mining, and feel the utmost assurance that no effort will be spared to make the most out of this present development, as a stepping stone to future researches for more of the same kind of mineral.

### Important Publication.

We have been favored, by the publisher, with the title page and prospectus of the quarto work entitled, "The Metallic and Agricultural Wealth of the Pacific States." The editor of this work has recently disposed of the "Mining and Scientific Press," with the view of devoting his entire attention to the publication of the work; to this end he is making arrangements for an early visit to the Atlantic States and Europe. The work if carried out according to the prospectus, will be one of the most valuable publications yet presented to the public, and will prove of incalculable benefit to California and the Pacific Coast generally, in bringing the immense mineral wealth of this region more prominently before the Capitalists of Europe. The object is a laudable one and ought to be encouraged. Mr. Silversmith is one of our oldest citizens and is well acquainted with the subjects of which he treats. He desires but little aid and that we trust he will readily obtain. The following is the prospectus:

### PROSPECTUS TO THE PEOPLE OF THE STATE OF CALIFORNIA, OREGON, AND ADJACENT TERRITORIES.

The Subscriber, one of your earliest citizens of California, and for the most of his time engaged as a journalist, and particularly of late in a journal devoted to the chief resources of the Pacific States, respectfully submits the following plan and proposition for the purpose of bringing hitherto from England, France and Germany the working classes, mechanics, artisans, miners, and metallurgists for the purpose of developing the resources of our thinly populated States and Territories, thereby reducing labor, the establishing of factories, the occupation of the millions of acres of arable land now lying dormant, and to work our mines. The benefits accruing to our Government—to marine conveyances—the merchant—the manufacturer, the mining companies and professional companies, cannot but be beneficial, provided the facilities are offered to such emigrants, and according to the tenor of our laws governing such. For these purposes the subscriber desires to seek only the necessary or pecuniary aid to take him across the Pacific and Atlantic, so that he may be enabled to lay before the people of Europe a work which he has compiled from authentic sources, comprising the mineral wealth of the Pacific States, including partly Mexico, Lower California, British Columbia, etc., together with a synopsis of the climatology, agriculture, arts and manufactures, with interesting statistics of our imports, exports, and population. Also, the organic acts of our State, the local and general laws governing mining, the Pre-emption Act, and kindred subjects pertaining to the Pacific States. The author reserving for himself the right of translation of this work (which has cost him three years of his time to collect and compile) in the German and French languages.

He contemplates making the tour to the Atlantic States and Europe in February or March, 1863, and will equip himself with the mineral materials, fossil remains, etc., and illustrate them by diagrams and discourses throughout the Atlantic States and Europe.

Such a work which your petitioner has in view cannot be published in this State without an extraordinary outlay, nor have we the materials, artists or skill in copperplate or wood engraving. The work will comprise from 400 to 500 pages, to be handsomely illustrated with colored plates, maps, etc., quarto form. The subscriber will add thereto a complete list of all the associations and companies, especially mining companies.

"He goes to Europe for the purpose of seeing all the manufacturing places, machines and utensils; also to the leading mining districts and metallurgical establishments, to acquire from the best sources there the best mode of treating our rich minerals, and lay at the service of our people before our people through the Mining and Scientific Press, and the work he hereby offers. But the most important subject in his mission is the inducements he will offer to Europeans of our immensely rich mining fields and agricultural lands, together with the great advantages offered by a liberal and protective government for industrious citizens.

The subscriber, therefore, calls upon the citizens in the Pacific States who have the interests of our new States nearest their heart, to aid him in this grand but laudable undertaking with means. Each subscriber will be furnished with a copy of this work, which is designed to be useful in the counting house, to the professional man and miner. The author desires to state that whatever aid or subscription he may be furnished with by the people of this State he will refund after the publication of the work, or leave the amount to be taken out in books.

Respectfully submitted,

JULIUS SILVERSMITH.

**RECENT PATENTS.**—Granted to CALIFORNIA INVENTORS through the Pacific Agency, J. SIEVERSMITH, Solicitor:

E. E. MATTESON, Nevada: *Hydraulic Derrick*. This invention has been illustrated in this journal, and has obtained great celebrity throughout the State.

ELANDER HEATH, San Francisco, *Spiral Spice and Sage Mill*. See "Mining and Scientific Press," June 9th, 1862, Vol. V., No. XIII.

G. F. DEETKEN, formerly of Nevada: *Apparatus for separating Gold from Pyrites*. This is one of the most useful inventions of the day. Mr. Deetken has successfully worked sulphurets for a number of years in Nevada county, professes to have obtained greater results than others engaged in the same occupation. Mr. D. has recently established himself in this County, on the San Bruno Road, near the Islais Creek, where he has erected chemical and metallurgical works.

### Routes and Fares from San Francisco to Foreign and Domestic cities.

*Pacific Mail Steamship Company*—Steamers leave for New York via Panama, on the 1st, 11th and 21st of each month. 1st cabin, \$250; 2d cabin, \$200; 3d cabin or steerage, \$100.

*Nicaragua Steamship line*, Ross, Dempster & Co., agents. Steamers leave for New York via isthmus of Nicaragua, on the 21st October, and semi-monthly thereafter. Price of fare not yet stated.

To Portland, Victoria, &c., \$60. Crescent City, Trinidad, &c., \$20 \$30. San Diego, Monterey, and Los Angeles, \$20 to \$30. Sandwich Islands, per sailing vessels, \$100 to \$150. Australia, sailing vessels, 1st class, \$250 to \$300, China and Japan, sailing vessels, 1st class, \$200 to \$250. Mexico, \$30 to \$50.

*California Steam Navigation Company* dispatch steamers daily to—Sacramento, \$5; Stockton, \$4; Petaluma, \$3.

*Overland Mail Company*—Stages leave daily for St. Louis via Salt Lake; fare, \$200.

### THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hackneyed course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone." "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who congregate there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonable.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE.—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.



PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA  
connecting via the Panama Railroad with the steamers of the Atlantic  
and Pacific Steamship Company, at Aspinwall.

FOR PANAMA,

The following Steamships will be dispatched in the month of December 1892  
Dec. 1st—St. LOUIS, Captain E. S. Farnsworth,  
" 11—GOLDEN AGE, W. H. Hudson, Commander.  
" 21st—SONORA, W. F. Lapidge, Commander.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama  
AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York  
For freight or passage, apply to

FORBES & BABCOCK, Agents,

Corner of Sacramento and Leidesdorff sts.

OPPOSITION

People's Line to New York.

ROUTE CHANGED FROM NICARAGUA TO  
ISTHUS OF PANAMA.

Through in Twenty-one Days!!!

FIVE DAYS AHEAD OF THE MAIL.

The fast and favorite Double Engine Steamship

MOSES TAYLOR, 1,500 tons,

E. HOWES ..... Commander.

Will be dispatched for

PANAMA,

From Mission street Wharf.

Punctually at 9 o'clock A. M., of

THURSDAY, ..... DECEMBER 11, 1892,

Connecting at Aspinwall by the Panama Railroad,

And thence by the Splendid Steamship.

AMERICA,

2,000 Tons.....JEFF. MAURY, Commander.

The America has proved herself the swiftest Steamship afloat, and in comfort, cleanliness and regulation is incomparably superior to any other running to Aspinwall.

The Moses Taylor is known to be the fleetest ship on the Pacific, and passengers may confidently anticipate making the through trip in 22 days, as obstructions which are said to have been thrown in the way of passengers, by the Nicaragua Government, cannot possibly occur on this route.

THE PEOPLE'S LINE

Has been established to meet the universal demand for an

OPPOSITION,

And every Californian should give it a preference for the public good, as well as his own private advantage, which will be secured by

Reduced Fare, Good Accommodations, and Quick Trips.

This line is intended to be a permanency, and is not put on for the purpose of being thought or driven off. Speed, safety and the utmost comfort of passengers are the main objects. To secure these no merchandise freight (other than specie) will be taken. The MOSES TAYLOR is built with Water-Tight Compartments, and is unequalled for safety as well as speed.

For information or passage apply to

I. K. ROBERTS, Agents,  
425 and 427 Battery street.

LABOR-  
SAVING

Rock Drilling Machines.

TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRYMEN. The subscriber, Patentee and Agent for GARNER'S PATENTS, will continue to receive orders for

HAND, HORSE, AND

STEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way.

A FOUR HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process.

Address orders to  
oc7-3m]

WM. W. DUNN,  
Fromont street, bet. Market and Mission, San Francisco.

F. G. BEPLER,

PRACTICAL COPPERSMITH,

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery,

SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work.

All orders from the country promptly attended to.

je6

A. ROMAN & CO.

WHOLESALE AND RETAIL

BOOK ESTABLISHMENT.

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals. Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Piggott on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Phelps.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell.

Hyver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weissbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

Together with many other works in this & similar lines

Books imported to order on short notice.

A. ROMAN & CO.,

417 & 419 Montgomery Street.

Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS. OR  
manufacturers of Horticultural Implements, are referred to the above  
invention. For description and engraving see MINING AND SCIENTIFIC PRESS  
No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentee,) San Francisco.

sepl-3m

Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache  
bekannt sind, können ihre Mittheilungen in der deutschen  
Sprache machen

Skizzen von Erfindungen mit kurzen, deutlich geschriebenen  
Beschreibungen beliebe man zu adressiren an.

JUL. SILVERSMITH, Federal Building, Room 23.

RASCHE & SONS,

131 Montgomery street, bet. Bush and Sutter,  
SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

PIANOS, SHEET MUSIC

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;

T. GILBERT, Boston;

C. MEYER, Philadelphia.

Whose Pianos they have always on hand, for sale and to rent.

PIANOS FOR RENT.

New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the trade and professors of music.

au14

V. SQUARZA'S

PUNCH FACTORY.

WE PRESENT HEREWITH THE PORTRAIT AND TRADE MARK OF  
the gentleman who heads this article. Mr. Squarza is favorably  
known in this State for his Anti-Divorce Liqueur and similar productions, as  
manufactured by him. We may mention that Mr. Squarza is an aid in the  
chemico-distilling science, hence the celebrity of his articles. He has two  
establishments for the sale of his famous Punch—one on Leidesdorff,  
the other on Montgomery street—which are constantly thronged with our  
bon vivants.

The following is a list of his liquors, all of which we have tasted, and find  
them the most delicious and harmless beverages in this city, being pure,  
and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,	Anisette,
Cognac do.	Whisky do.	Kirschwasser,
Arac do.	Kirschwasser do.	Brandy Cocktail,
Anti-Divorce Punch,	Coca do.	Anti-Dyspepsia Bitters,
Coffee do.		Appetiser,
Tea do.	Morning Comfort,	Ladies' Tears.
Pineapple do.	Kuennel,	

And CHAMPAGNES of all brands.

Dr. Van Zandt,  
Consulting Physician and Surgeon,

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity!  
Made Subservient for the Cure of all Nervous  
and Spinal Diseases.

THAT THIS PRINCIPLE, successfully applied to diseased states  
of the system, is to prove the great sought-for necessity, long wanted  
by physicians, to add their medicines in overcoming organic and functional  
derangements of the human body. It is a part of the great principle of vitality  
known as nervous influence and necessarily must have much to do in  
obviating diseased action.

Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium  
of the ELECTRIC principle; and should this secret and hidden equipoise  
of health be broken or lowered—should the body be negatively electrified  
when it should be positively charged—is not the current broken, and  
is there not a war of forces going on in our system? This needs correcting,  
and in order that the tissues of the body should be susceptible to remedial  
agents we must first restore and

Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly  
in this great magnetic or electrical intensity of the earth, with its influence  
upon our bodies in health and disease, I am led to take advantage of the  
press, through which to awaken attention to the subject, that good may  
come to all.

No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life  
blood, render the stomach, liver, heart, kidney and all the natural functions  
active by ELECTRICAL excitation, and at once the aged, the palsied,  
the nervous, the dispirited, the melancholic, the dyspeptic and the invalid  
revive under its benign influence.

To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and  
office practice, is owing to his correct views of the origin of all their mal-  
adies. Ladies can consult him with entire confidence, as he is no speculator  
upon human ills—but is proving himself the only member of the legitimate  
profession in California who is really successful in removing those ills which  
are the peculiar province of the sex. His high appreciation of their deli-  
cately attuned nervous organism, together with their great sympathetic  
life, renders him doubly able to assuage those silent complaints which  
they bear so patiently and so long. No social disquietude need longer  
afflict our home circles; for he can arouse the stricken energies; restore the  
wonted tenacity of the body; awaken the melancholic and desponding; arrest  
those drains which cause so much anxiety; cure those protean mal-  
adies which have so long

Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at  
the stomach, wandering pains, wasting away of strength; extreme debility  
and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that  
general depression of life's powers, which go to render her life a misery  
and death a boon. Dr. Van Zandt, with his new method of exciting the  
Electro-Galvanic current, together with his remedial measures which are  
adapted to the necessities of California, will assure you of a complete and  
radical recovery of all bodily and mental infirmities, and will restore you  
to usefulness, and spare you a blessing to your family and to society.

All the World Over

wherever disease exists, whether special to the soil and climate or com-  
mon to all regions—epidemic or casual, acute or chronic, contagious or non-  
contagious—it is as necessary to restore the ELECTRO-GALVANIC equilib-  
rium, especially in California, as it is to give food to the starving. This  
statement is based upon a series of facts extending through many years, and  
verified by hundreds of patients; so that no principle of science, no rule of  
experience, no result of any well known cause, rests upon more sure and  
unassailable foundations, than those which underlie the world-wide reputa-  
tion of Electricity for the cure of all nervous states of the body, faulty di-  
gestion, mental and physical debility or prostration, coughs, asthma, wander-  
ing pains of a rheumatic, gouty or mercurial character, and all forms of  
disease, the result of scrofula or cankerous habit of body,

None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—  
melancholy which you cannot shake off—loss of power which you cannot re-  
gain—depression of spirits which weigh you down—wakefulness that knows  
no sleeping—business that languishes for want of energy—a void which no  
society can fill—suspicion which no assurance can allay—Go to Dr. Van  
Zandt, for his great success, and the safety with which he administers his  
new method of Electrical excitation, together with his remedies, which are  
adapted to the requirements of climate and constitution, will assure you a  
radical removal of all bodily and mental infirmities, within the scope of  
science and man to remove.

The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt  
has made these affections an especial study, and that he is the only Sur-  
geon on our State, who has a diploma for that branch of practice. Very  
many of the eye and ear troubles are purely deranged nervous actions, and  
are cured by his electro-galvanic battery—as amaurosis, squinting, cata-  
ract, floating specks before vision, twitching of the eyelids, nervous deafness,  
roaring and buzzing noises in the ears, giddiness, etc. All operations suc-  
cessfully done on these delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29—3m

FREDERICK KESMODEL,  
Cutler and Surgical Instrument Maker

817 KEARNY STREET,

Between Jackson and Washington streets,

SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September,  
1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one in-  
terested, is called to his new method of fitting and adapting Trusses to the  
different cases. It is a well known fact that there has as yet been no system  
of fitting Trusses. There are many different styles which have proven good  
in many cases, but they are all uncertain and cannot be relied on, and in  
severe cases are altogether useless. The following are some of the advan-  
tages I claim for these Trusses above any and all others: First—The Pad is  
formed on the parts to be compressed by taking a plaster cast. Second—  
Having a correct model, it enables me to make the Pad of any desirable  
material, such as horn, ivory, etc. Third—The Pad is so adjusted to the  
spring that movement of the body will move or displace it. There are  
many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL,  
Inventor and Patentee.

ap8 tf



## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual lost was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

## For parting silver from gold when gold

is below 300-1000ths. fine. . . . . 3cts per oz.  
 " from 300-1000ths. to 750-1000ths fine. 7cts " "  
 " " 750-1000ths to 950-1000ths " 14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
 301 " 500, 7cts. " " "

## DEPOSITS FOR FINE BARS

\$1.16-4-11ths cents per standard ounce,  $\frac{1}{2}$  per ct gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1.21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1.16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1.16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

In regard to the deposits of *Washoe silver*, the rule will hereafter be, that the value of gold contained in the same will be paid in gold coin, and the value of silver in silver coin. The value of the silver will be calculated at \$1.21 per standard oz., and is exempted from the coinage charge, unless deposited for silver dollars, in which case a charge of  $\frac{1}{2}$  per cent. will be made additional. Bullion of the above denomination will be entered on the gold and silver register, as most congruous with the physical aspects of the material, but in the warrant it must be marked that so much is to be paid in gold and so much in silver, according to the contents reported by the assayer. The above rules, and charges were promulgated on July 10th, by Superintendent Robert J. Stevens.

U. S. BRANCH MINT, Nov. 6th, 1861.

On and after the 15th inst., a charge varying in accordance and the character of the deposit, from half a cent to three cents per oz., gross, in addition to the general rates, and be imposed on all bullion deposited for coinage or manufacture, which will require toughening or extra refining to render it suitable for mint purposes.

ROBT. J. STEVENS, Superintendent.

## READ THIS!

**COAL OIL EXPLOSION.**—ON SATURDAY EVENING, WHILE MR. BREWSTER was engaged in the Summer street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

## COMET ILLUMINATING OIL!

Manufactured expressly for Stanford Bros.

THIS POPULAR

**BRAND OF KEROSENE**

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

**Best Family Oil in the Market**

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

## 50 lbs. MARINE AND FIRE-PROOF PAINT

MANUFACTURED BY THE PACIFIC METALLURGICAL WORKS, IN THIS city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandeliers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 lbs. Fire-Proof Paint,

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil; if a lighter color is wanted, mix less paint, more lead.

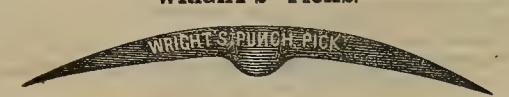
ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof, as one coat when properly applied will last three years.

G. T. FORQUE, Superintendent.

S. C. BRADSHAW, Agt.,

WORKS, North Beach; Office, 318 California st.,  
SAN FRANCISCO

## WRIGHT'S PICKS.



JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 41 Market street,  
Opposite Battery, San Francisco.

je20

## LEWIS COFFEY &amp; RISDON'S

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work or the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner of Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

A Circular containing further information, and a synopsis of the Patent Laws of various countries, will be furnished on application to J. Silversmith, Government House, San Francisco.

Miners, Inventors, Agriculturalists, Capitalist and Mechanics, will find it to their advantage to subscribe for the MINING AND SCIENTIFIC PRESS—being the only journal of that class published upon this continent. Issued every Saturday at four dollars per annum.

Address, J. SILVERSMITH,  
SAN FRANCISCO.

## MUSIC! MUSIC!! MUSIC!!!

A. KOKLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise.

Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c., &c.

Light's New Patent Insulated Iron Frame is put into all of

Light & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

A. KOKLER, Agent.

CORNS AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skillful and scientific Professors of Philadelphia, and having made this branch of surgical science my speciality for nine years, enables me to operate skillfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia, and also the people of the State of California, of the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we commend you with confidence to the citizens of San Francisco, as one of the most skillful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertions in the new and growing city of the Pacific.

We subscribe ourselves yours,

Rev W Stanton, L L D,  
Richard A Vaux,  
Dr Straud, M D,  
Dr Lewis, M D,  
Cleopie Stevens, M D,  
Samuel Panoast, M D,  
Walter C Foster, M D,

S W Howard, Att'y at Law,  
Pierce Butler,  
Henry B Linton, M D,  
Wm L Howard, M D,  
Phillippe Lidy, M D,  
Myers Davis, M D,  
W M Thompson, M D, and others.

No. 716 Catharine street—this is to certify that Dr. Kennedy has removed corns and bunions off my feet, which have annoyed me for years. He also removed a cancer from my middle finger, which I had no use of for a period of six months. I cordially commend him to the suffering humanity of Philadelphia as a skillful surgeon.

MRS. J. W. HAMMOND.

## REFERENCES:

John Corbett, M D,  
Capt McClure,  
Wm H Mills, Jr.,  
Rev Walter W Stanton, L L D,  
Samuel W Howard, Att'y at Law,  
Cleopie Stevens, Pharmacist,

Mrs Smith, Greene street,  
Mrs W L Howard,  
Walter O Foster, Com Mer, Third st,  
Myers Davis, Market st, above Fifth,  
Major Comstock,  
Mrs W. Patridge, Walnut street.

From Dr. W. L. Stevens: Dr. Kennedy has operated upon my feet, and has effectually cured me of some torturing pests that I have been annoyed with for years.

From the Rev. Walter M. Thompson: This is to certify that while sojourning in Philadelphia, Dr. Kennedy has operated on three of my family to my entire satisfaction.

From the Hon. Wm. M. Thorn, ex-member of the Ohio Legislature: This is to certify that I called on Dr. Kennedy to operate on my feet: He displayed great skill as a surgeon, and I am satisfied that he has effectually cured me of those torturing pests which have annoyed me for many years.

From Geo. F. Omerly, 637 Arch street: This is to certify that I called on Dr. Kennedy. He has operated on my feet to my entire satisfaction. au21





A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI. SAN FRANCISCO, SATURDAY, DECEMBER 13, 1862. NO. 7.

#### Practical Information for Mineral Prospectors.

Every working miner, and especially every "prospector" in California, should have some knowledge whereby he may be enabled to arrive, at least, to an approximate idea of the nature and value of the various descriptions of ore which are constantly coming under his observation. To neglect this suggestion is to ignore one of the most important advantages which even the commonest laborer, in this state, has of securing, at some opportune moment, a sudden and ample fortune. Very few persons, in this state, will read this article without calling to mind some person, who, to their knowledge, has, for the lack of the very information contained in this article, actually lost an opportunity of enriching himself.

In our last issue we gave a very simple, yet generally reliable acid test by which the presence of silver in any ore may be readily ascertained. For the convenience of those who may wish to preserve the two, we have reproduced it at the conclusion of this article. We now proceed to give some general instructions by which almost any person may use the common blow-pipe, with very satisfactory results, in all ordinary cases, such as will be likely to come under the notice of the California prospector. These instructions have been carefully prepared by a gentleman of large scientific attainments. In all ordinary cases, the rules here laid down may be implicitly depended on, but in complicated cases, where the assay gives uncertain results, proportionate caution should be employed both in operating and deciding. In cases of an extremely doubtful nature, and for final conclusions, previous to the outlay of large expense, resort should always be had to a practical and competent assayer.

In our next issue we shall give a simple method by which the amateur operator may ascertain, with a very great degree of exactness, the proportion of mineral contained in any given quantity of ore presented for assay.

"The miner will commonly judge a mineral to be metallic, if it has a metallic aspect, or if it feels particularly heavy in the hand; but others also discover metallic properties to the blowpipe by:—

1. Yielding a bead of metal to the reducing flame, on charcoal, which is facilitated by the addition of soda.
2. Passing off in vapor, more or less dense.
3. Attracting the magnetic needle, after heating in the reducing flame on charcoal.
4. Coloring borax strongly, either on charcoal or pipe-clay.

"When a metallic bead is produced, it may be pure silver, tin, lead, bismuth, copper, gold, or iron, copper, nickel, or cobalt, alloyed with arsenic, or a mixture of various metals. Gold and silver may be distinguished by not losing their brilliancy in the outer flame; tin by its whiteness and softness; lead and copper are immediately distinguished by their color; and bismuth by fuming and evaporating in the reducing flame. The arsenical alloys and compounds, not clearly distinguishable by these means, nor by their streak upon the black flint, must be examined by fluxing with borax. If it give green or pipe-clay, it is copper, though it happened to be bleached by the arsenic. If blue, it is cobalt. If orange, yellow while hot, and the color fly on cooling, it is iron or nickel; and these are distinguished by their reducing flame on charcoal, where the borax bead is bottle-green with iron, but almost colorless with nickel. If the metal yield no bead, but pass off in vapor, it is quicksilver,

arsenic, antimony, bismuth, or possibly tellurium, cadmium, or zinc. If the vapor smell strongly of garlic, it is arsenic. If it leave a circular halo on the charcoal, it is antimony, tellurium, bismuth, or cadmium. If the halo be white, it is antimony. If orange-yellow, it is to be subjected to the reducing flame. If it disappear easily, tinging the flame green, it is tellurium. If it evaporate with difficulty, and without tinging the flame, it is bismuth. If it be red or orange-red, it is cadmium. If the mineral evaporate readily with no odor, or only that of sulphur, and without leaving a white or yellow halo, it probably contains quicksilver, which is proved, if on mixing a portion of it with soda and iron filings, heating it on charcoal, and holding a bit of gold coin in the vapor, the quicksilver show itself on the coin. If using soda with the reducing flame, the assay burn after a while with a pale green flame and white smoke, covering the charcoal with a white flaky powder, it contains zinc. If it will neither yield a bead of metal or volatilise, but attract the magnetic needle after the operation of the reducing flame, it most probably contains iron; but it may be nickel or cobalt—easily distinguished by fluxing with borax. If the mineral, or the residue, after part has evaporated, will neither yield a bead, volatilise, nor attract the magnetic needle, we have then to flux it with borax, and the following table will show what it contains:

If it stains the borax,		The metal is
In the reducing flame, on charcoal.	In the cacinating flame on pipe clay.	
Blue .....	Blue .....	Cobalt .....
Bright Green .....	Colorless .....	Chrome .....
Colorless or reddish .....	Bluish Green .....	Copper .....
Bottle Green .....	Orange, while hot, paler as it cools .....	Iron .....
Pale .....	As iron .....	Nickle .....
Dirty green .....	Yellow .....	Uranium .....
Purple .....	Colorless .....	Titanium .....
Colorless .....	Purple .....	Manganese .....

"Copper is reduced in the metallic state in the reducing flame; and hence, when in quantity, shows itself in its usual red color in the bead.

"In mixtures of metals the indications are sometimes ready enough. If on pipe clay, we find the borax tinged between orange and purple while hot, and becoming purple in cooling, whilst it gives a bottle green on charcoal, we immediately perceive the indications of iron and manganese—a very common mixture. If, again, we find it bright green on pipe clay, and emerald green on charcoal, a mixture of chrome and copper is indicated. But it more frequently happens that mixtures of metals give ambiguous results, and that they can only be ascertained by caution and perseverance.

"Although most of this is sufficiently easy, it requires a little practice; and, to give the operator confidence in his results, this is best performed upon substances which he knows to contain the metals he assays for. Thus, if he operate on common mundic, he is certain, after a sufficient time of roasting and heating on charcoal, to obtain a residuum capable of affecting the magnetic needle. White mundic will leave the same residue, after giving off an arsenical smoke. Green copper (malachite) will be sure to yield a bead of copper on charcoal, and will as certainly produce a fine green with borax on pipe clay. Any of the ores of a lead may be promptly reduced to a metallic bead on charcoal.

"The vapor of antimony may be easily distinguished from that of arsenic, by the garlic odor of the latter. A minute particle of manganese will tinge borax a fine purple or pipe clay, in the outer flame: but on charcoal in the blue flame, a much larger portion, dissolved in borax, will become limpid and colorless. A particle of titanium ore will give an oppo-

site result, bleaching on the pipe clay, and becoming purple on the charcoal.

"The experimenter should also not fail to reduce tin ore by the aid of soda, and some ore of zinc by the same means, that he may become acquainted with the appearances in these assays. Thus varying his practice as materials happen to fall in his way, he will quickly acquire familiarity with the appearances and results, and feel confidence in any assay he may undertake.

**HOW TO TEST SILVER ORE.**—Pound a small quantity of the rock supposed to contain the metal, as fine as possible, then place it on a shovel, or anything handy, and hold it over a slow fire, to burn away sulphur or arsenic, which are generally mixed with the ores of silver. Then take a cup, or any glass or earthenware vessel, into which pour a small quantity of nitric acid (aqua fortis,) in which put about a teaspoon full of the powdered ore, which boil in the acid for a minute or two. Then take some common salt, dissolved in water, in another vessel; pour a small quantity of the salt and water into the acid; if it turns white and looks milky, there is silver in the ore. The above is a cheap, convenient and certain test for silver.

**THE TALLOW TREE.**—Among the trees which have of late been extensively distributed in the northwestern provinces of India and Punjab is the tallow tree of China—*Shillingia sebifera*. In China it is largely cultivated, and it is said that by its produce alone the taxes are paid in the district of Hong Kong. It grows equally well on low alluvial plains, or the rich mould of canals, in sandy soils, and on the acclivities of mountain. From its seeds tallow and oil are procured, which are extensively used in China. Its wood is hard and durable, and its leaves yield a black dye. It is now thriving well in India. The tallow and oil are easily procured from the seeds. The tree, therefore, is well worthy of attention.

**GIGANTIC IRON CASTINGS.**—Referring to the huge anvil block, weighing from 35 to 38 tons, cast by Messrs. Fawcett, Prestor & Co., Liverpool, for a steam hammer, to melt which two air-furnaces and two cupolas were engaged, the quantity of iron melted being 40 tons—the time required to cast, from opening the furnaces, being less than a quarter of an hour, a correspondent of the "Journal of the Franklin Institute" says: "This was a heavy undertaking, and doubtless the large number of ladies and gentlemen who assembled to witness the operation of casting were highly gratified at the beautiful spectacle. In a mechanical point of view, however, the casting of a similar piece at the Port Richmond Ironworks, Messrs. I. P. Morris, Towne & Co., on July 1, shows a much greater capacity for doing this description of heavy work. The block weighs 31 tons, and to pour it 37½ tons of metal were melted in one cupola in four hours from the time the blast was put on. The quantity of air used in the blast was 4,000 cubic feet per minute. The coal consumed was 1 lb. for each 9 lbs. of iron melted. The mould was filled in four and a half minutes pouring. The work was done with the ordinary resources of the establishment, and without any display or assemblage of visitors."

**GOING UP HILL.**—The *Enterprise* says that people are going up hill in Virginia City—climbing up the sides of Mount Davidson and Mount Ophir to stake off and fence building lots. However high an individual may have set his stakes, another is always found ready to drive pegs a rod or two higher. Proceeding upon this plan what is to prevent people from going with household goods to the highest peak of Mount Davidson.



## California Manufacture of Turpentine and Rosin.

A firm in Marysville have recently commenced the manufacture of the above articles. They have 8000 trees in the foot hills, and are now engaged in tapping them. They calculate on an average yield of about 300 gallons of turpentine and 60 of rosin per week, from the above number of trees upon which they propose to commence operating. The recent advance in the price of these articles will no doubt render their manufacture in this State a very profitable business for some time to come, and as very little capital is required to go into the business we see no reason why large quantities may not be made in this State—sufficient not only for our own consumption, but also for exportation.

## HOW TURPENTINE IS PRODUCED.

In the above connection we clip the following interesting article on the produce of turpentine, from the Oregon Farmer:—

The immense forests in North Carolina, which cover the sandy ridges between the swamps and water-courses, consist mostly of the long-leafed pine, *Pinus palustris* of the Southern States. From them is gathered one of the great staples of North Carolina—the turpentine. And although this product and its derivatives are, in our country, almost in as common use as bread and meat, very little is known of the manner of procuring them. We will therefore endeavor to describe it accurately: These trees at maturity are seventy or eighty feet high and their trunks eighteen or twenty feet in diameter near the base. They grow close together, very straight, and without branches to two-thirds of their height. Overhead, their interlocking crowns form a continuous shady canopy; while beneath the ground is covered with a thick, yellow matting of pine-straw, clean, dry, level, and unbroken by undergrowth. The privilege of tapping the trees is generally farmed out by the land owner, at a stated price per thousand, say from twenty to thirty dollars. Under this privilege the laborer commences his operations. During the winter he chops deep notches into the base of the tree, a few inches from the ground, and slanting inward. Above, to the height of two or three feet, the surface is scarified by chipping off the bark and outer wood. From this surface the resinous sap begins to flow about the middle of March, at first very slowly, but more rapidly during the heat of the summer, and slowly again as winter approaches. The liquid turpentine runs into the notches, or boxes, as they are technically called, each holding from a quart to half a gallon. This as it gathers, is dipped out with a wooden spoon, barrelled, and carried to market, where it commands the highest price. That which oozes out and hardens upon the scarified surface of the tree is scraped down with an iron instrument into a sort of hod, and is sold at an inferior price. Every year the process of scarifying is carried two or three feet higher up the trunk, until it reaches the height of twelve or fifteen feet—as high as a man can conveniently reach with his long handled cutter. When this ceases to yield, the same process is commenced on the opposite side of the trunk. It is estimated that one man will dip ten thousand boxes.

The produce is carried to market on a sort of dray or cart which holds but two barrels, consequently the barrels are always seen setting about in the woods in couples. The trees at length die under these repeated operations. They are then felled, split into small sticks, and burned for tar. The dead trees are preferred for this purpose, because when life ceases, the resinous matter concentrates in the interior layers of the wood. In building a tar kiln, a small circular mound of earth is first raised, declining from the circumference to the center, where a cavity is formed, communicating by a conduit with a shallow ditch surrounding the mound. Upon this foundation the split sticks are stacked to the height of ten or twelve feet. The stack is then covered with earth as in making charcoal, and the fire applied through an opening in the top. As this continues to burn with a smouldering heat, the wood is charred, and the tar flows into the cavity in the center, and thence by the conduit into the ditch, or into vessels sunk to receive it.

**IRON BRIDGES.**—The French will acquire quite a celebrity for iron bridges. The Orleans Company is now engaged in throwing one over the left bank of the Scorf, an arm of the sea which forms with the Blavet the port of Lorient. The bridge will have a length of 1,100 feet, and will be composed of ten arches in masonry, and three spans comprising altogether 576 feet. The metallic part will be supported by two piers, established on a rocky foundation, at a depth of sixty feet below the ordinary tides. When this great work is completed, the first portion of the Nantes and Brest Railway (that is, as far as Lorient) will be in a position to be opened for traffic.—*London Mining Mag.*

**THE SUEZ SHIP CANAL,** which is being cut through the Isthmus, to connect the Mediterranean with the Red Sea, will be 94 miles in length, 260 feet in width, and 26 feet deep. The work upon this gigantic enterprise is rapidly approaching a completion.

## California's Gold-producing Rival.

The Colony of Victoria, in Australia, must always have a peculiar interest for Californians. It is a great rival in the production of gold—our chief rival in the commerce and industry of the Pacific—the head of the British Anglo-Saxon Colonies on the Pacific, as California is of the Anglo-American States.

The first permanent settlement, in what is now Victoria, was made at Melbourne in 1835; but the population continued to be small until the gold discoveries in 1851, three years later than those of California.

The Australian gold fields differ much in character from ours, being mostly in deep diggings, where the hydraulic hose and sluice cannot be used to advantage, or where at least they are not employed so extensively as in this State. They were very rich at first, and for a time they turned out a stream of gold more abundant than that which flowed from the claims of California. But the auriferous deposits of Victoria appear to be approaching exhaustion more rapidly than ours. During the last five years, the decrease in production has been very rapid. By a comparison of the gold exports manifested during the first five months and a-half of the present year, with the corresponding terms of the seven preceding years we see an average decrease of eight per cent. annually. In 1855, the value was \$41,658,100; in 1856, \$29,484,005; in 1857, \$25,364,225; in 1858, \$23,860,815; in 1859, \$21,436,710; in 1860, \$18,648,155; in 1861, \$17,144,695; and in 1862, \$14,340,785. The total decrease from 1858 to 1862 is about sixty per cent. If the manifested exportation during the remainder of the present year be at the same rate as during the first five months and a half, the total exportation will be about \$30,000,000. Victoria imports more grain, provisions and manufactured articles generally than does California, but it produces wool, copper ore and several other articles of export in greater abundance; and the proportion of the amount of gold sent away and manifested to that produced may be about the same in the two countries.

The amount of land cultivated is 430,000 acres, one half the amount in this State. Two-fifths of the title land is in wheat, one-fifth in oats, one-fifth in hay and green forage and 1,400 acres in vines. The average wheat crop this year was 18 bushels per acre; of barley, 18 bushels; and of oats, 23 bushels; of wine, 300 gallons.

The population of Victoria on the 1st of March, 1862, was 544,046, of whom 322,346 were males, and 221,700 females. The number of aborigines is less than 2,000. Of the total number, 138,000 were born in Victoria, 169,000 in England, 87,000 in Ireland, 60,000 in Scotland, 24,000 in China, 19,000 in other Australian colonies, 2,554 in the United States, 10,418 in Germany, and 1,250 in France.

The rate of wages is less than in California. Journeymen carpenters, masons, bricklayers and blacksmiths, get from 8 to 11 shillings (\$2 to \$3) per day, and pick-and-shovel men 5 to 6 shillings. House servants are usually hired for long terms. Female cooks receive from £35 to £50 (\$175 to \$250) per year, general servants £25 to £30, and nursemaids from £16 to £25.

## Weather Prognostics.

Rules for foretelling the weather have prevailed for a long period. There are allusions to them in the scriptures. "When it is evening ye say, It will be fair weather for the sky is red. And in the morning, It will be foul weather to-day for the sky is red and lowering." (Matt. xvi. 2, 3)—Some of the early poets give various weather signs. Virgil (Dryden's translation) says:—

"Wet weather seldom hurts the most unwise,  
So plain the signs, such prophets are the skies."

A Greek poet by the name of Aratas, is said to have written a poem of 417 lines, on weather prognostics, upward of two thousand years ago. From extracts translated into English which we have lately met with, it appears that some of the weather signs by which we are now guided, are mentioned in this ancient poem. For example:—

"Examine attentively when the sun rises and sets. Do you not see the perihelion shine north or south, or even at both of these points at the same time? Beware of neglecting this observation; for when this phenomenon shows itself, evening or morning, at the moment when the sun touches the edges of the horizon, it is a sign that the great Jupiter is going to send us tempests."

The phenomenon alluded to is popularly called "sun-dog" in this country, and is generally thought to indicate stormy weather. According to Aratas—"It is also a sign of rain when a cluster of stars appear indistinct as one. When the heron flies swiftly to the coast, with great cries, it is a sign of coming tempests; and also when sea-ducks and other aquatic birds rise in the air. When the clouds extend themselves, rise, and cover the sky with a grayish veil; when we see in the air a double rainbow; when the rays of any star lose their brilliancy, we may expect rain."

Of signs to be drawn from the animal creation he says: "Often when it is going to rain you will see aquatic birds dip, and dip again, incessantly; you will see the swallow flutter around the banks, balance itself upon the waves, and, skimming the water with a light wing, dare at last to bathe

in its plumage. The importunate voice of the frog will be heard with more power from the midst of the marshes; the melancholy cry of the solitary owl startle the morning." Again, he writes; "The ravens and the jays foretell rain when we hear them, in large bands together, counterfeiting the voice of the sparrow-hawk."

On the whole, probably there is but little new under the sun, in regard to foretelling the weather, since this poet wrote his prognostics, twenty centuries and a half ago.

## Declension of Matrimony.

The Newburyport Herald says that the census statistics show that over four-sevenths of the marriages in Massachusetts are among the foreign born population. Why is it? For the most simple of reasons—the foreign born can afford to get married, and the native cannot; and this must be, so long as our extravagant modes of life continue. In social life there never was a people tending to deeper and more destructive social corruption—and that is most evident from the records of all the courts, and the columns of all the newspapers—than Americans. Once was the time when a wife was a "helpmeet;" now in a thousand of cases you can change the "meet" to "eat" and make it read more truthfully.

We boast of our system of education; we have female high schools, female colleges, female medical schools, and female heavens. Our girls are refined, learned; and wise; they can sing, dance, play pianos, paint, talk French and Italian, and all the soft languages, write poetry, and love like Venuses. They are ready to be courted at ten years, and can be taken from school and married at fifteen, and divorced at twenty. They make splendid shows on bridal tours, can coquette and flirt at the watering places, and shine like angels at the winter parties. But Heaven be kind to the poor wretch that marries in fashionable circles. What are they at washing floors? O, we forgot: nobody has bare floors now—how vulgar that would be! What are they at making bread and boiling beef? Why, how thoughtless we are—to be sure they will board, or have servants. What are they at mending old clothes? But there we are again; the fashion changes so often that nobody has old clothes but the rag men and paper makers now! What are they at washing babies' faces and pinning up their trousers? And here is our intolerable stupidity once more; having children is left to the Irish! What lady thinks of having children about her now? or if she is so unfortunate, don't she put them to wet nurses to begin with, and boarding schools afterward? We repeat—we have come to a point where young men hesitate and grow old before they can marry and afterward keep clear of bankruptcy and crime. What is the consequence? There are more persons leading a single life—are there more leading a virtuous life? It is time for mothers to know that the extravagance they encourage is destructive of the virtue of their children; that all the foolish expenditures making to rush their daughters to matrimony, are, instead of answering that end, tending to destroy the institution altogether.

**EFFECT OF MUSIC ON THE SICK.**—The effect of music on the sick has been scarcely at all noticed. In fact, its expensiveness, as it is now, makes any general application of it out of the question. I will only remark here that wind instruments, including the human voice, and stringed instruments capable of continuous sound, have generally a beneficial effect.—while the piano-forte, with such instruments as have no continuity of sound, has just the reverse. The finest piano-forte playing will damage the sick, while an air "Home, Sweet Home," on the most ordinary grinding organ, will sensibly soothe them, and this quite independent of association.—*Florence Nightingale.*

**RARITY OF THE AIR.**—It appears that the extreme rarity of the atmosphere in Virginia City is quite noticeable. This is to be seen in the reluctant manner in which the smoke of the city rises and hangs suspended but little above the roofs of the houses; also, it is very plainly perceived by the amount of panting we are forced to do if we walk briskly a few hundred yards.

**FIRE.**—A fire broke out in Virginia City on Friday evening of last week, on the west side of B street, a few doors south of Union, which would probably have been very destructive had it not have been almost instantly discovered and as promptly subdued. It took from the stove pipe of a restaurant.

**HORSE POWER.**—The "horse power," as applied to steam engines, is said to have arisen when people began to supercede horse mills with steam mills. The manufacturer would naturally enquire of the party desiring a steam engine, how many horses he wished to dispense with—hence the term now generally used, which is certainly more practical than scientific.



TO MINING COMPANIES.

We earnestly solicit from mining companies and associations the following blank statement, filled according to the data hereby accompanying. The purpose for which we seek this information is important to every citizen and stockholder on this coast; it would also be productive of beneficial results—i. e., inducing capitalists to invest in our mining operations, thereby infusing new life and vigor into business generally in our States and Territories. Little, if anything, is known of our metallic wealth in Europe or the Eastern States, hence we desire as much of the blank filled by you as may be interesting and instructive to the people of this State and those interested abroad.

We know of no mining district in Europe or America where this kind of information is not willingly rendered by parties owning property of this nature; and we know of no better medium for making public the richness of our mines. We shall send blanks to mine and mill proprietors for every quarter, and will gladly publish the contents for the information of the community:

Title of Company and names of officers for the year.	Amount of stock & value per share.	When incorporated

Location.	Average assays of ore.	Process employed and number of stamps.	General remarks.

PALMER, HANSCOMB & CO.,

Golden State Foundry and Machine Works,  
First Street, near Market, San Francisco, Cal.

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications. Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast. San Francisco, November 29, 1862 3m

Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 ACRES, HAS RECENTLY been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wildcat mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to HARVEY S. BROWN, No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office, No 18 6mo

DEETKEN'S

Chemical and Metallurgical Works,

ON SAN BRUNO ROAD, ISLAIS CREEK,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov8-3m

JULIUS SILVERSMITH,

COMMISSIONER FOR NEVADA TERRITORY.

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington sts., Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE WHO HAVE BUSINESS relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

W. T. & J. GARRATT,  
CITY

BRASS & BELL FOUNDERS,  
Cor. First & Market sts., opp. Oriental Hotel,  
SAN FRANCISCO.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE AND LIFT PUMPS, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES AND NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."

LEANDER RANSOM,  
CIVIL ENGINEER  
AND SURVEYOR,

Having been connected with the public surveys of the State of Ohio for 20 years, and the public works of the State of California for 7 years.

ALSO, STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF THE STATE SCHOOL LANDS,  
At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash, and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct 3m

AGENCY FOR PATENTS.—The undersigned having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Patents and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,

Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, LOANS NEGOTIATED

Washoe Stock Exchange,

N. E. cor. Montgomery and Merchant sts.,  
SAN FRANCISCO.

L. W. NEWELL & CO.,

Buy and sell Washoe, Emerald and other Mining Stocks and Securities. sep20

THEODOR KALLENBERG,

MAKER OF MODELS  
for Inventors,

MACHINES, MATHEMATICAL Optical and Philosophical Instruments Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps.

Repairing of Machinery promptly attended to. au7-3m  
(No. 4 Sansome street, corner Market, San Francisco.)

DEVOE & CO.'S

STEAM ENGINE

—AND—

MACHINE WORKS,

Corner Market & Fremont streets, San Francisco.

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILL Irons, Flour Mills, Quartz Mills, etc., etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT Cutting

AGRICULTURAL MACHINERY of all kinds made and repaired.

Duplicate parts of Threshing and Reaping Machines and Threshing Teeth made to order, on the most reasonable terms.

Steam Engines and Boilers constantly on hand, and for sale cheap. Screw-Cutting Turning Lathes for sale. jcl8 DEVOE & CO.

LATEST IMPROVEMENT

In LADIES' BUCKLES.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS State, as well as to Jewelers and Dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERIK REICHEL, Manufacturing Jeweler,

620 Merchant street, San Francisco. sep11

THE

NEW ENGLAND SEWING MACHINE for \$25!

THIS MACHINE stands confessedly at the head of everything now before the public. In cheapness, neatness, compactness, durability and beauty, it has no rival. It is made with special reference to the wants of a family, and any one with the aid of the printed directions can learn to work it successfully in a few hours. It will work from leather to the finest cambric without the change of needle, tension, or feed. It gives the best satisfaction where it is sold, and all who use or examine pronounce it better adapted to meet the wants of every family than any other machine now offered to the public. Guage and hemmer attached.

Every machine warranted, and kept in order free of charge. This is the only cheap machine that will do all kinds of family sewing.

STEWART & SHEAR, General Agents, No. 60 Second street. sep11

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T. my23

THE FOLLOWING GOODS TO BE FOUND AT  
H. D. PEARCE'S:

Gents' Heavy Gold Cases, different patterns;  
Ladies' Heavy Gold Cases, do do;  
Gold Telescopic Pen and Pencil Case;  
Extension Screw, Heavy Silver, for Gents;  
Extension Screw, Heavy Silver, for Ladies;  
Silver Extension Cases;  
Silver Telescopic Cases;  
Screw, Silver and Ebony Desk Holders;  
Slide Silver and Ebony Desk Holders;  
Reverse Silver and Ebony Desk Holders;  
Pen Holders, Silver and Ebony;  
Pen Holders, Gold and Ivory;  
India Rubber Propelling Pen and Pencil Cases  
India Rubber Propelling Pencils, short.

All the above goods are made to order and warranted; will be sold cheap for cash. There are some thirty different patterns, leaving an opportunity for parties to select and be suited.

A cheaper class of Pens direct from New York, at wholesale only.

Gold Pens constantly on hand. Gold Pens repaired. H. D. PEARCE, 606 Montgomery street, between Clay and Merchant, up stairs

GREAT REDUCTION  
IN PRICES.

STANFORD BROTHERS,

121, 123 and 125 California Street,  
KEEP THE LARGEST STOCK OF ALL KINDS  
OF  
Lamp Stock,

And will Sell Cheaper than any House in this State

LAMPS,  
CHIMNEYS,  
WICKS,  
CAMPHENE,  
BURNING FLUID,  
ALCOHOL,  
TURPENTINE,  
COAL OIL,  
KEROSENE OIL,  
COMET ILLUMINATING OIL.

SPERM OIL,  
LARD OIL,  
MACHINERY OIL,  
RAPE SEED OIL,  
CHINA NUT OIL,  
LINSEED OIL, Raw and Boiled,  
POLAR OIL,  
SHARK'S OIL,  
NEATSFOOT OIL,  
TANNER'S OIL,  
&c., &c., &c.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. apl6tf

PHILADELPHIA BREWERY,

Second street, corner of Folsom, SAN FRANCISCO, CAL.

Hoelscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same time our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Bier." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom. Nov9.

FULTON FOUNDRY AND IRON WORKS.

HINCKLEY & CO.,

MANUFACTURERS OF STEAM ENGINES, Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings, Mining Pumps, and all kinds of Machinery, Amalgamators, Etc., Etc.

47 & 49 First Street,

BET. MARKET AND MISSION, SAN FRANCISCO

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to Iron when cast. Repairing to Machinery neatly done Pattern Making in its various forms.

D. B. HINCKLEY WM. E. WORTH WM. A. FIELD

SQUARZA'S PUNCH.

HOME MANUFACTORY.

WHOLESALE AND RETAIL.

No. 44 Leidesdorff street, near Sacramento st.

Branch at 406 Montgomery street. my30

S. ROSENBAUM & CO.—Importers of pure Havana Cigars, Tobacco, etc., corner Clay and Battery, 25 and 27 Cedar street, New York.



## Mining and Scientific Press.

W. B. EWER, . . . . . Editor.

SATURDAY . . . . . DECEMBER 13, 1862.

The MINING AND SCIENTIFIC PRESS is published at the Federal Building, Room 24, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance. Advertisements, Fifty Cents per line. A liberal discount made to quarterly advertisers.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. SPERMOPHYING and ELECTROPHOTING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## THE TAX LAW—LEGISLATIVE BLUNDERING.

By the telegraphic report to the Associated Press, published in the *Bulletin* of Saturday last, we are told under the head of Congressional proceedings, that "The Committee of Ways and Means will probably hold a meeting to-day [Dec. 5th] to consider certain propositions of amendments of the Tax Law, believed to be necessary for its successful operation."

Here is a plain admission by the law makers themselves, that the Tax Law, passed at the last session of Congress, and which the Federal Tax Collectors are now endeavoring to enforce, is inept or unjust; probably both, in some of its provision. This is a fact that our mechanics, hereabouts, and business men generally, have seen from the time of the first promulgation of the law. It is to be regretted that so few mechanics and thoroughly educated business men are elected to Congress and our various State Legislatures. It is only by the election of, at least, a few such men, that the great Manufacturing, Mechanical and Mercantile interests of our country can be truly represented. Those interests will ever be imperfectly represented so long as mere politicians, and third rate lawyers—men with scarce a moiety of business qualifications are elected to represent us in the halls of Legislation. The bill in question affords abundant evidence that it was prepared and passed by persons unacquainted with machinery, manufactures, and business generally. For example:—

Under date of October 9, Commissioner Boutwell writes to a gentleman in Baltimore:—"Your letter of the 2d inst., containing inquiries as to whether the tax under the excise law is laid both on castings and finished machinery, without reference to the fact as to whether the component parts of said machinery have been previously taxed as castings or not, is received."

I am of the opinion that the view taken by the manufacturer is sustained by the law. Castings are liable to a tax of three per cent, unless otherwise provided. When sold by the manufacturer the tax must be assessed and paid. If afterward these castings are assessed as component parts of other articles, the latter (that is the articles) will be assessed without regard to the fact of previous payment."—*New York Times*, Oct. 16.

By this decision it will be observed that castings which are made at one shop and carried to another, belonging to a second party, and then put up into a complete piece of machinery are twice taxed, once at the shop where they are cast, and again at the shop where they are put together, as the component parts of an entire machine. Now this certainly cannot have been intended, or if so our law makers have been legislating for the benefit of large capitalists at the expense of smaller ones; for instance:—

In the decision as given above by Commissioner Boutwell, and the comments we have made thereupon, it will be observed, that large machine shops and manufactories, which are provided with foundries, pay a single tax upon their products that are composed partly of cast and partly of wrought metal, while the small manufacturers of such articles pay a double tax on their castings. There are many small machine shops, the proprietors of which purchase their iron and brass castings from separate foundries, and fit up these castings, and combine them with other parts made of wrought iron and steel. Now the castings which they purchase are taxed three per cent, and their finished work is assessed at three per cent upon its whole value, of course their castings are taxed twice. On the other hand, a large establishment in which machinery is manufactured, and

has a foundry connected therewith, escapes the tax upon their castings, &c. Their castings are not taxed, as such, because not sold separately. This tax will inure entirely to the benefit of large machine establishments, and tend to the ruin of smaller ones.

This law also falls injuriously on other classes of manufacturers, and, in most cases is entirely, shifted, in fact, from the capitalists, on whom it was intended to fall, to the poorer classes or the consumers; as for instance the tax on gas, in many cities has been directly levied, by the companies, upon their customers, the consumers, who, in addition to their regular bill of so much to the number of feet of gas consumed, now find a little item of federal tax added to the usual amount. Now such a thing was never intended by the law makers—They have blundered again. We know not how the gas tax is paid in this city, but according to the *New York "Gas Light Journal"* that is the way some of the Eastern companies are paying their taxes, while others more patriotic, willingly submit to the true intent of the law and pay the tax themselves, as corporations. This plan of "shifting the responsibility" is very generally, (though oftentimes indirectly) practiced by manufacturers of all classes, to the detriment of the consuming and laboring people.

We judge from the item in the telegraphic dispatches of Saturday, alluded to in the outset of this article, that it is in part to obviate these evident abuses of the tax law, that the Committee of Ways and Means are about revising the same. We trust the Committee will have the good sense to consult some well informed practical men—merchants, mechanics and manufacturers—in their proposed modification thereof. It is not for the interest of the manufacturers that the burthen of taxation should fall upon the poorer classes, neither do they, as a body, desire it. Their only wish is that they should be protected from the sharp practices of a portion of their own number, so that the burthen may fall equally upon those for whom it was intended—and upon those only.

## THE NEVADA INCORPORATION BILL.

We have said nothing heretofore upon the Incorporation Bill now pending before the Legislature of Nevada Territory, for the reason that having taken upon ourselves the management of the *Press* since that bill came up, and having many pressing duties meanwhile crowding upon us, we have not had time to give it that attention necessary to a thorough knowledge of its provisions and probable workings—in fact we have been unable to find time to read the bill. We notice that there appears to be quite a contrariety of opinion regarding the bill among Washoeites themselves—the Territorial *Enterprise* being warmly interested in its favor while its contemporary, the *Virginia Union*, is decidedly opposed to its passage. We believe the bill is now pending between the House and Council. The following paragraph from an editorial on the propriety of the passage of the bill, which we clip from the latter paper, appears to us to be a correct view of the question:—

What should have been done in this connection was simply to pass a domestic incorporation law, leaving parties hereafter to incorporate under it, or under foreign law, as they might deem expedient. To close down so harshly and abruptly upon all corporations elsewhere formed, is not only unjust, but contrary to international courtesy and the practice common amongst all enlightened commercial peoples. All we really need at present is a law providing for domestic corporations, so that our citizens can organize at home or go elsewhere, as they may see fit. The question of foreign corporations should have been left for future legislation, when the light of experience would have enabled us to adopt such measures as seemed necessary and just. A local law would have answered every purpose for the present, and saved us from the charge that will elsewhere lie against us, of acting in violation of good faith and the comity of States. Of the same character is that clause demanding that the annual election for trustees shall be held at some point within the Territory of Nevada.

THE VOLCANIC SMELTING FURNACE.—The *S. F. Call* says successful experiments in reducing copper ore are now being made in this city with the Volcanic Smelting Furnace, a recent invention by Mrs. E. J. Hall. Half a ton of the ore was vitrified and the metal running in less than an hour yesterday—the only fuel used being two bushels of charcoal to one bushel of rock. Specimen bars of copper from this furnace can be seen at the offices of Col. J. D. Stevenson and T. Ogg Shaw, in this city.

## COPPER.

The prospective value of the copper interest to this State and city can scarcely be overrated. The discoveries already made render it certain that millions of dollars must ere long be employed in working these mines, and large amounts of capital must also be invested in this city in the erection of machinery for reduction and smelting; for no one can for a moment suppose that San Francisco will long permit the transport from her wharves of the immense amount of copper ore which will soon seek a foreign market for its reduction, unless the necessary facilities are afforded at home. The copper mines of Calaveras, only forty miles from this city and within eight or ten of steam navigation, are already assuming an importance or no ordinary magnitude. Over half a million dollars' worth of ore from these mines has already passed through this city for Eastern and European ports, and large amounts of foreign capital are now in this city seeking investment either in the mines themselves, as working capital, or ready for investment in the purchase of ore for foreign shipment. Our own capitalists are also buying and shipping for the Eastern market, to a limited extent, however. There is no class of mines which more readily commands capital than copper, nor any which dispenses more important local benefits to the community where they exist. They contribute far more real wealth than either silver or gold mines. We may safely predict that the copper mines of California will soon rival in importance the silver mines of Nevada, adding many millions, annually, to the real and personal wealth of our State. Many of the claims in Calaveras County are already held at a high valuation.

In our last issue we gave a general review of the extent and progress of the copper mining interest of the State. We shall continue to lay before our readers, from time to time, whatever news, of interest, transpires in relation to this growing branch of industry. During the week we have noticed the following items:—

The *Stockton Independent* of Dec. 2nd, says in relation to the progress of Copperopolis:—"The Union Company at Copperopolis is now working with three engines, running night and day. The Keystone, Empire and Calaveras claims are giving out better prospects of late; and the Webster, a new claim, under the management of Capt Sanders, is coming rapidly into importance. Schools, Sunday schools and religious societies are taking root at Copperopolis, and altogether the town is acquiring a degree of permanence and character hardly to be expected of a place whose foundations were laid but two years ago."

The *Stockton Republican* of the 4th instant, notices a rich copper strike as follows:—"During this week the men employed in prospecting the Beauregard Company's copper claim in Calaveras county, have struck some very rich rock, paying over \$60 per ton. The rock is in abundance, and the mine has every indication of becoming richer and more extensive as the shaft and prospect progresses. This is cheering news, as all the shares are held in this county and a large proportion in the city."

MEETING OF NEVADANS.—A large and respectable meeting of residents of Washoe, temporarily sojourning in San Francisco, was held at the Russ House, in this city, on the 8th inst, to take into consideration the proposed Incorporation Law, for Nevada Territory. After much and careful consideration the meeting adopted an address, or petition to the Territorial Legislature, setting forth, as the opinion of the meeting, that the law, as proposed would operate most disastrously to the interests of the Territory, and asking that the same may not be passed into a law.

It appears to be the general impression, both here and in Virginia City, among business men, that the passage of the law will have a tendency to restrain San Francisco capitalists from investing under it; and that capital now moving in that direction will be drawn toward the mines of Sonora. If the tide of mining trade toward Nevada should receive a check by reason of the passage of such a law as the one proposed, it will prove most disastrous to the now flattering prospect of that new Territory.

A TUNNEL, after the manner of the Thames Tunnel is now in process of construction under the river Indus to serve as a road way for the great railroad now being constructed between Calcutta and Peshawar.



## WASHOE MINING INTELLIGENCE.

We condense the following items from the Washoe papers, chiefly from the *Territorial Enterprise*:—

It is thought by many business men in Virginia City, that the mills now in operation there will be insufficient in number and capacity to crush all the ores that would be raised here next season. The argument is that in the whole range from Cedar Hill to Gold Hill, a distance of nearly two miles, nearly every company holding ground are on their veins and will very soon be taking out pay rock, all of which must be reduced by somebody, and the mines already open are capable of supplying what mills there are at present in the country. The Editor of the *Enterprise* thinks it will be the wisest plan, however, for capitalists to defer the further erection of mills until the actual demand is seen. Next spring will be soon enough.

LARGE amounts of Gould & Curry rock are still being crushed in the mills at Gold Hill and Silver City. The Central mill is also working upon rock from that mine and turning out heavy yields of silver.

The Mariposa mill has just cleaned up about four hundred pounds of amalgam. This mass of metal is principally silver, the ore worked being from the Gould & Curry mine.

OPHIR IMPROVEMENTS.—The Ophir Company have erected a very neat brick building just above the old Spanish stone house, intended for the Superintendent's room and offices for the Company. About fifty yards further north they have put up a stable, 32 by 72 feet. This latter is also a good building, well gravelled inside. These improvements are on the Company's claim.

HOISTING HOUSES.—Along the line of the Comstock lead from Virginia City to Gold Hill, says the *Enterprise*, are a number of factory looking buildings which the stranger would be puzzled to comprehend. Smoke stacks protrude from their roofs; jets of steam spurt in intermittent puffs from their sides; but about them a stillness reigns that forbids the possibility of their being quartz mills. What then can be the work so silently performed by these laboring engines? Their work, we answer, is not the noisy surface clatter of the reduction works; their labor is far below the surface of the earth in the dusky shafts that lead into the dark bowels of the deep buried mine. There, day and night, they strain at hoisting up to daylight the gleaming ores of the black galleries below. These are hoisting houses.

A FEW new buildings are still to be seen in process of erection in various parts of the city, but they are more scattered than a fortnight since.

THE IRONSIDES.—The shaft of the Ironsides Company, on the Vermilion ledge, is down ninety feet. They are now drifting into the hill and taking out a good looking quality of white quartz, intermixed with a large proportion of the chlorine substance so abundant in the Ophir. This company hope soon to be taking out first-class rock in sufficient quantities to run a mill or two. The company is located much higher up the mountain than the Comstock, so high, in fact, that it was thought at one time a thing almost incredible that paying ore should be found at such an elevation above the great zone containing the Virginia and Comstock leads.

THE PIONEER COMPANY after striking their ledge, have had to commence a drain-tunnel on account of water coming in too freely. This tunnel commences just below the Vermilion tunnel, Virginia ravine, will be 700 feet long, will strike the lead at least 300 feet below the surface, and about 150 below the first tunnel run. It is thought the new tunnel will not only drain the lead thoroughly but develop a better quality of ore.

UNITED STATES AIR SHAFT.—The upper air shaft of the United States tunnel, on the ridge south of Cedar Hill, is now down nearly two hundred feet. It will be two hundred and forty feet at the point of its intersection with the tunnel. It is sunk in such a manner as to pass down about twelve feet south of the tunnel, and the two will be connected by means of a short drift. By sinking to one side of the tunnel and drifting into it all danger of rocks falling upon the workmen passing along the tunnel is obviated. After the completion of the air shaft they are at present engaged upon, the company think they will be able to drift into the hill to their veins without the expense of sinking other shafts for ventilation.

IOWA SHAFT.—The shaft now being sunk on the Iowa, in

the northwest part of the city, has reached the depth of one hundred feet. The shaft is boarded up and divided into two compartments, and the dirt is hoisted by means of a windlass with a double rope and two buckets. The company do not expect to strike their vein before the shaft shall have attained a depth of one hundred and fifty feet. The rock now coming out is of a tolerably hard, blue quartzose species, containing iron pyrites in considerable quantities.

PAY ROCK IN AMERICAN FLAT.—The *Enterprise* is assured by an eye-witness that the Baltic Sweezy Company, south-east of Gold Hill, and in the north margin of American Flat, have struck a fair quality of ore in their claim. They have a shaft down 160 feet in the lead, and are taking out rock resembling that of the Eliza Bradley on Santa Rita claims—galena with sulphate of silver.

FIRST MILL FOR PALMYRA.—A lot of lumber went out to Palmyra district last week, to be used in the construction of a mill for the Yuba Company, or at least a mill for crushing the ore of the Yuba lead. This is only the beginning—the first of many mills that will be erected in that district at no distant day.

SPANISH No. 2.—Spanish Company No. 2 have erected a building over their engine and hoisting apparatus twenty by thirty feet in size. The building was raised, inclosed and roofed between sunrise and sunset of the same day. In two days more the pumps and hoisting machinery were at work.

DANA MILL.—The Dana mill is well nigh completed. It will be running in about a month. They have on hand a large stock of fuel, mostly nut pine, from the timber trees east of the Carson.

THE SIERRA NEVADA COMPANY have quite a lot of heavy timbers on the ground for use in their mine, and are receiving still more. Their timbers are brought from the foothills of the Sierra Nevada range.

THE NEW PLAY, at the American, by Dr. Bein, has proved quite a success. The scene is laid in Italy. The business is good, and the interest of the piece well kept up throughout. The play is pronounced by good judges, not only original, but very excellent, and one well worth seeing. It has been performed twice and will be again presented, this evening for the benefit of the author—which we trust will be a substantial one.

A NEW toll road between Virginia City and Gold Hill pierces a high hill through a tunnel 180 feet long.

## Mining Stock Report.

SAN FRANCISCO, Dec. 12th, 1862.

Ophir.—Sanborn's Circular of last week quotes sales of 468 shares of Ophir Stock at rates from \$2400 to \$2750 per foot. The sales at the Board for the week have been very uniform—from \$2450 to \$2475, having dropped somewhat from last week.

Gould & Curry.—Fifty shares were sold last week for \$2550 and 40 for \$2560, 1st January. The sales at the Board for the present week are quoted at from \$2,475 to \$2,500.

Central.—38 shares were sold at \$1,425 and the same number subsequently at \$1,600 as per Sanborn's Circular.

California, after remaining quiet for several weeks is quoted at \$1,200, an advance of \$100. 240 shares sold for \$1,260, 1st of March.

Cholar is rapidly advancing and is quoted at the Stock Board from \$305 to \$350. \$500 was asked on Wednesday.

Potosi has been but little enquired for. Small transactions are quoted at from \$75 to \$85.

North Potosi is quoted at \$7—offered at \$7 50.

Sierra Nevada is quoted at \$65. 40 shares changed hands at that figure, last week.

Daney is quoted at \$100 bid.—200 asked. A slight falling off.

Burning Moscow is quoted by Sanborn's Circular at from \$63 to \$65.

Mount Davidson is selling for \$5 50—\$6 asked.

Meredith is not quoted. \$25 is asked.

Burnside is not quoted.

Iowa quoted at \$150.

Norton is quoted at \$20. Forty shares changed hands at that price.

Sacramento is quoted at \$20—\$32 50 is asked.

Lucerne is not quoted.

Hale and Norcross is quoted at \$250 \$300 asked. No sale reported.

Rogers quoted at \$22 1/2 bids—\$27 asked. \$5 assessment.

Lady Bryan—no sales quoted.

## Esmeralda Stocks.

The Wide West is still advancing, and is quoted at from \$400 to \$410.—\$420 is generally asked.

Antelope is quoted at \$70—with \$100 asked. Sold at the Board, on Thursday for 100 dollars.

Elena is not quoted. \$8 is asked.

Silver Hill is quoted this week at from 12 to 14 dollars.

Utah has buyers at \$18—held at \$26.

Real Del Monte quoted at \$20 with \$25 asked. An advance of \$8.

## Coso Stocks.

The Josephine had bidders, the past week, at the Stock Board at from \$15 to \$16.—Holders asking \$20 to \$21.

Coso—12 to 13 at the Board—\$20 asked.

Willow Springs—quoted at \$15.

## Mexican Mines.

St. Nicholas Silver Mining Co. is quoted by Sanborn's Circular at \$105.

Mina Prieta finds no recent buyers, but is held firm at \$110.

Diego Padre is quoted at from 30 to 33 dollars..

## WASHOE STOCK REPORT.

[Compiled chiefly from the *Daily Territorial Enterprise*.]

Very little stock is now being offered for sale in Virginia City. Several parties have recently withdrawn their stocks from the market, preferring to borrow money at a high rate of interest rather than sell at present prices. The low rates now ruling present a most favorable opportunity for profitable speculation, as money can scarcely be invested, at this time, in stocks which will not soon advance to a very high figure over that at which they are now selling. The continuance of pleasant weather causes the impression to prevail that we are to have on open winter, and one highly favorable to mining operations.

The La Crosse Company, it is reported, have struck into the same rich ore as that now in dispute between the Moscow and Madison Companies. A knowledge of this will probably cause some activity in that stock.

Norton stock is, just now, without demand. The same development of rich ore which this Company has made during the past few weeks would, at a more favorable season, have caused ready sale for their stock at three times its present rates.

Oriental.—Several small transactions took place in this stock, last week, at low rates.

Mammoth Ledge. Considerable ground in the Mammoth Ledge, Eagle District, is offered for sale. Some two years since a great excitement was created in consequence of the rich rock from this district. The entire district appeared like one continued mass of valuable ore, but after some little prospecting, with an unfavorable result the district was comparatively deserted, it being impossible to find any well defined ledge. It is still thought by many that valuable discoveries must be made in that neighborhood.

Baltic was offered, on the first instant, for \$25 per foot.

North American was enquired for, at same date, at \$5, but no transactions are quoted in either.

Sacramento.—Thirty dollars was offered on the 1st. The rock of this Company's ledge is said to be very rich, though but little gold is to be seen on the surface. The *Enterprise* of the 5th instant notices a fine specimen from this ledge, on exhibition at the door of Paxton & Thorner's Banking House, in Virginia City. The specimen weighs 800 lbs.

Some very rich rock has recently been struck at the foot of Cedar Hill, which has the appearance of being a regular ledge. Several claims have been located on the North and South extensions of the Company making this discovery, who have taken steps for the prospecting of their claims, a work which will soon decide whether the discovery in question is a ledge or merely a slide from the hill above. The discovery appears to be attracting considerable attention, and the discoverers are venturing the wildest predictions in regard to its probable richness.

Ironsides.—The late activity in this stock has subsided. The demand for it has ceased, and the stock has been withdrawn.

The Tunnel stocks seem to be meeting with much favor.

Mount Davidson and Cedar Hill are firm at San Francisco quotations. Some enquiry is made for United States.

Waterhouse—20 feet sold at \$3 50 per foot.

Gay—10 feet sold at \$3 per foot.

Union—is enquired for at \$5 per foot. This company have a large amount of rock upon the surface which has the appearance of being rich, but still it is thought cannot be worked to a profit. The vein, however, improves with its depth, and the Company will no doubt soon develop a valuable mine.

The Yellow Jacket is taking out valuable rock, which is paying a handsome profit—and, as a consequence, their stock is considerably enquired after, but at such rates as the holders persistently refuse to accept.

The Crown Point Mining and Mill Company appear to be doing a thriving business. Their mill is kept constantly at work upon rock from their mine.

The Palmyra Diggings.—Favorable accounts continue to be received from these Diggings. Several Companies are taking out ore, which is being crushed with very satisfactory results.

Nevada.—Six dollars per foot is offered for this stock; but none changes hands, holders firm at higher rates.

The Yolo Company which recently suspended operations on their tunnel, have recommenced the work of extending the same to their several ledges. It is thought that one hundred feet of extension will reach their first ledge.

Belecher is enquired for at \$10 per foot. This Company is located immediately in front of the Crown Point ledge. Their stock is beginning to attract some attention among buyers.

Ten feet of Birdsell changed hands for \$16 per foot—a slight advance over last quotations. This mine has been opened at the surface, also at a depth of 75 feet, and again at 100 feet. They have proved that the vein is constantly improving with its descent, and have now let a contract to open it fifty feet deeper still, from which point they propose to commence active mining operations.

Bloomingsdale sold for \$4 50 per foot—ten feet changed hands.

Zouave is offered at \$10 per foot. This Company is now taking out fine ore, such as should greatly enhance the value of their stock.

York is offered at \$5 per foot, without buyers. Hazel Green at \$5. Ten dollars are offered for Eureka without finding buyers.

The following stocks, not enumerated above, are in the market in Virginia City, and held at the figures annexed:—

Santa Fe	25 00	Summit	25 00
Empire	6 00	Washington Ledge	6 00
McBee	25 00	Milton	20 00
Belvidere	15 00	Laboring	16 00
Peytona	25 00	Sweezy	26 00
Durgan	4 50	Caledonia	8 00
El Dorado	70 00	St. George	3 00



## GIFTS, DONATIONS AND SUBSCRIPTIONS

To the work entitled "THE METALLIC AND AGRICULTURAL WEALTH OF THE PACIFIC STATES." The publisher desires to thank the several gentlemen whose names are hereto appended, for their mrgnanimity and aid in behalf of this important work.

Samuel Brannan, Esq., Citizen.  
John Parrot, Esq., Banker.  
Hyam Joseph, Esq., Citiz n.  
Ira P. Rankin, Esq., Collector of Customs.  
S. H. Parker, Esq., California Postal Agent.  
S. C. Bradshaw, Esq., Pacific Metallurgical Works.  
David Henriques, of the Board of Stock Brokers.  
Rev. Dr. E. Cohn,  
Rev. Dr. E. H. Bien.  
I. M. Mugarietta, Mexican Consul.  
H. Meyers, Citizen.  
Henry M. Hale, City and County Auditor.  
Dr. J. C. Tucker, of Steamer Moses Taylor.  
Dr. J. W. Van Zandt.  
Harvey S. Brown, Attorney and Counsellor.  
William Schmolz, Coiner, U. S. B. Mint.  
James Hitchens, Supt of Willow Spring Mine.  
G. F. Deetken, Supt Metallurgical Works.  
etc. etc. etc.

**BOILER EXPLOSIONS.**—Much is said in reference to boiler explosions about super heated steam, peculiar gaseous formations, and other conditions and circumstances, supposed to be entirely beyond ordinary control: yet the question has often been put and never yet answered in the affirmative—"Did any person ever know of a boiler explosion when there was full evidence that every thing was right about the quantity of water in the boiler, about the safety valve, the braces and such other matters as may at all times be within the positive knowledge of the engineer?" All reliable experience goes to prove that neglect and carelessness are the producing causes of accident; and perhaps we may add that such carelessness generally arises from a lack of proper appreciation of the responsibility of the position of an engineer, frequently on the part of the employer, who, unwilling to pay the wages of a competent person, too often takes up with one whose only knowledge of an engine has been obtained by working about one, at most, perhaps, occasionally assisting a competent engineer in the discharge of his duties. The control and management of a steam engine is one of the most important and responsible duties connected with machinery, and should never be entrusted to any other than one thoroughly educated to the business—one who is not only capable of running one, but who also has sufficient knowledge to be able, at all times to pronounce upon the safety and capacity of an engine. None others should be allowed to run an engine, especially when lives are exposed to danger from any class of accidents. It is only by a refusal to employ incompetent persons that a proper regard for the responsibility of the position can be maintained among engineers themselves—such as will ensure a general immunity from this class of accidents.

A BIT of phosphorus, from a match, ignited under the finger nail of a German student at Dusseldorf and, though the flame was immediately extinguished, the hand swelled so rapidly that the whole arm had to be amputated.

A PIECE of land was recently sold in London at the rate of \$9,300,000 per acre, equal to \$272 50 per square foot.

## 50 lbs. MARINE AND FIRE-PROOF PAINT

MANUFACTURED BY THE PACIFIC METALLURGICAL WORKS, IN THIS city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 lbs. Fire-Proof Paint,

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linsseed oil: if a lighter color is wanted, mix less paint, more lead.  
ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof, as one coat when properly applied will last three years.

G. T. FOUQUE, Superintendent.

S. C. BRADSHAW, Agt.,

WORKS, North Beach; Office, 318 California st.,  
SAN FRANCISCO

## Important Publication.

We have been favored, by the publisher, with the title page and prospectus of the quarto work entitled, "The Metallic and Agricultural Wealth of the Pacific States." The editor of this work has recently disposed of the "Mining and Scientific Press," with the view of devoting his entire attention to the publication of the work; to this end he is making arrangements for an early visit to the Atlantic States and Europe. The work if carried out according to the prospectus, will be one of the most valuable publications yet presented to the public, and will prove of incalculable benefit to California and the Pacific Coast generally, in bringing the immense mineral wealth of this region more prominently before the Capitalists of Europe. The object is a laudable one and ought to be encouraged. Mr. Silversmith is one of our oldest citizens and is well acquainted with the subjects of which he treats. He desires but little aid and that we trust he will readily obtain. The following is the prospectus:

## PROSPECTUS TO THE PEOPLE OF THE STATE OF CALIFORNIA, OREGON, AND ADJACENT TERRITORIES.

The Subscriber, one of your earliest citizens of California, and for the most of his time engaged as a journalist, and particularly of late in a journal devoted to the chief resources of the Pacific States, respectfully submits the following plan and proposition for the purpose of bringing hither from England, France and Germany the working classes, mechanics, artisans, miners, and metallurgists, for the purpose of developing the resources of our thinly populated States and Territories, thereby reducing labor, the establishing of factories, the occupation of the millions of acres of arable land now lying dormant, and to work our mines. The benefits accruing to our Government—to marine conveyances—the merchant—the manufacturer, the mining companies and professional community, cannot but be beneficial, provided the facilities are offered to such emigrants, and according to the tenor of our laws governing such. For these purposes the subscriber desires to seek only the necessary or pecuniary aid to take him across the Pacific and Atlantic, so that he may be enabled to lay before the people of Europe a work which he has compiled from authentic sources, comprising the mineral wealth of the Pacific States, including partly Mexico, Lower California, British Columbia, etc., together with a synopsis of the climatology, agriculture, arts and manufactures, with interesting statistics of our imports exports, and population. Also, the organic acts of our State, the local and general laws governing mining, the Pre-emption Act, and kindred subjects pertaining to the Pacific States. The author reserving for himself the right of translation of this work, (which has cost him three years of his time to collect and compile) in the German and French languages.

He contemplates making the tour to the Atlantic States and Europe in February or March, 1863, and will equip himself with the mineral materials, fossil remains, etc., and illustrate them by diagrams and discourses throughout the Atlantic States and Europe.

Such a work which your petitioner has in view cannot be published in this State without an extraordinary outlay, nor have the materials, artists or skill in copperplate or wood engraving. The work will comprise from 400 to 500 pages, to be handsomely illustrated with colored plates, maps, etc., quarto form. The subscriber will add thereto a complete list of all the associations and companies, especially mining companies.

He goes to Europe for the purpose of seeing all the manufacturing places, machines and utensils; also to the leading mining districts and metallurgical establishments, to acquire from the best sources there the best mode of treating our rich minerals, and lay these several important features before our people through the Mining and Scientific Press, and the work he hereby offers. But the most important subject in his mission is the inducements he will offer to Europeans of our immensely rich mining fields and agricultural lands, together with the great advantages offered by a liberal and protective government for industrious citizens.

The subscriber, therefore, calls upon the citizens in the Pacific States who have the interests of our new States nearest their heart, to aid him in this grand but laudable undertaking with means. Each subscriber will be furnished with a copy of this work, which is designed to be useful in the household, to the professional man and miner. The author desires to state that whatever aid or subscription he may be furnished with by the people of this State he will refund after the publication of the work, or leave the amount to be taken out in books.

Respectfully submitted,

JULIUS SILVERSMITH.

## WRIGHT'S PICKS.

## WRIGHT'S PUNCH PICK

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

Je20

JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.

## LEWIS COFFEY &amp; RISDON'S

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work or the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner of Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, WHILE MR. BREWSTER was engaged in the summer street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

## COMET ILLUMINATING OIL!

Manufactured expressly for Stanford Bros.

## THIS POPULAR

## BRAND OF KEROSENE

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

## Best Family Oil in the Market

STANFORD BROTHERS,

au14

Nos. 121, 123 and 125 California street.

RECENT PATENTS.—Granted to CALIFORNIA INVENTORS through the Pacific Agency, J. SIEVERSMITH, Solicitor:

E. E. MATTESON, Nevada: *Hydraulic Derrick*. This invention has been illustrated in this journal, and has obtained great celebrity throughout the State.

ELANDER HEATH, San Francisco, *Spiral Spice and Sage Mill*. See "Mining and Scientific Press," June 9th, 1862, Vol. V., No. XIII.

G. F. DEETKEN, formerly of Nevada: *Apparatus for separating Gold from Pyrites*. This is one of the most useful inventions of the day. Mr. Deetken has successfully worked sulphurets for a number of years in Nevada county, professes to have obtained greater results than others engaged in the same occupation. Mr. D. has recently established himself in this County, on the San Bruno Road, near the Islais Creek, where he has erected chemical and metallurgical works.

## Routes and Fares from San Francisco to Foreign and Domestic cities.

*Pacific Mail Steamship Company*.—Steamers leave for New York via Panama, on the 1st, 11th and 21st of each month. 1st cabin, \$250; 2d cabin, \$200; 3d cabin or steerage, \$100.

*Nicaragua Steamship line*, Ross, Dempster & Co., agents. —Steamers leave for New York via isthmus of Nicaragua, on the 21st October, and semi-monthly thereafter. Price of fare not yet stated.

To Portland, Victoria, &c., \$60. Crescent City, Trinidad, &c., \$20 \$30. San Diego, Monterey, and Los Angeles, \$20 to \$30. Sandwich Islands, per sailing vessels, \$100 to \$150. Australia, sailing vessels, 1st class, \$250 to \$300, China and Japan, sailing vessels, 1st class, \$200 to \$250. Mexico, \$30 to \$50.

*California Steam Navigation Company* dispatch steamers daily to—Sacramento, \$5; Stockton, \$4; Petaluma, \$3.

*Overland Mail Company*.—Stages leave daily for St. Louis via Salt Lake; fare, \$200.

## THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hacknied course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone;" "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonable.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction;—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.



**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA  
Connecting via the Panama Railroad with the steamers of the Atlantic  
and Pacific Steamship Company, at Aspinwall.

**FOR PANAMA,**

The following Steamships will be dispatched in the month of December 1862  
Dec. 1st—**ST. LOUIS**, Captain F. S. Farnsworth,  
" 11—**GOLDEN AGE**, W. H. Hudson, Commander.  
" 20th—**SONORA**, W. F. Laidge, Commander.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama  
AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York  
For freight or passage, apply to

**FORBES & BABCOCK, Agents,**

Je4 Corner of Sacramento and Leidesdorff sts.

**OPPOSITION**

**People's Line to New York.**

**ROUTE CHANGED FROM NICARAGUA TO  
ISTHUS OF PANAMA.**

**Through in Twenty-one Days!!!**

**FIVE DAYS AHEAD OF THE MAIL.**

The fast and favorite *Double Engine Steamship*

**MOSES TAYLOR, 1,500 tons,**

**E HOWES** ..... Commander.  
Will be dispatched for

**PANAMA,**

From Mission street Wharf.

Punctually at 9 o'clock A. M., of

**THURSDAY, ----- DECEMBER 11, 1862,**  
Connecting at Aspinwall by the Panama Railroad,  
And thence by the Splendid Steamship

**AMERICA,**

**2,000 Tons.....JEFF. MAURY, Commander.**

The America has proved herself the swiftest Steamship afloat, and in comfort, cleanliness and regulation is incomparably superior to any other running to Aspinwall.

The Moses Taylor is known to be the fleetest ship on the Pacific, and passengers may confidently anticipate making the through trip in 22 days, as obstructions which are said to have been thrown in the way of passengers, by the Nicaragua Government, cannot possibly occur on this route.

**THE PEOPLE'S LINE**

Has been established to meet the universal demand for an

**OPPOSITION,**

And every Californian should give it a preference for the public good, as well as his own private advantage, which will be secured by

**Reduced Fare, Good Accommodations, and Quick Trips.**

This line is intended to be a permanence, and is not put on for the purpose of being bought or driven off. Speed, safety and the utmost comfort of passengers are the main objects. To secure these no merchandise freight (other than specie) will be taken. The Moses TAYLOR is built with Water-Tight Compartments, and is unequalled for safety as well as speed.

For information or passage apply to  
I. K. ROBERTS, Agents,  
425 and 427 Battery street.

**LABOR-SAVING**

**Rock Drilling Machines.**

**TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRY-men.** The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

**HAND, HORSE, AND**

**STEAM-POWER MACHINES.**

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way. A FOUR-HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from half a penny-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process.

Address orders to  
WM. W. DUNN,  
oc7 3m] Fremont street, bet. Market and Mission, San Francisco.

**F. G. BEPLER,**

**PRACTICAL COPPERSMITH,**

**No. 118 (Old No. 22) Bush street,**

Between Sansome and Battery, SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work.

All orders from the country promptly attended to.

**A. ROMAN & CO.**

WHOLESALE AND RETAIL

**BOOK ESTABLISHMENT.**

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals. Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Piggot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Philips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical Directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell.

Ivory Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weisbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Frederick's Chemical Analysis.

Together with many other works in this & similar lines

Books imported to order on short notice.

**A. ROMAN & CO.,**

417 & 419 Montgomery Street.

**Gird's BUDDING KNIFE**

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS, OR manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentee),  
sept-3m San Francisco.

**Zur Beachtung für Erfinder.**

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen

Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an.

JUL. SILVERSMITH, Federal Building, Room 23.

**RASCHE & SONS,**

131 Montgomery street., bet. Bush and Sutter,  
SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

**PIANOS, SHEET MUSIC**

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

**A. A. GALE & CO., New York;**

**T. GILBERT, Boston;**

**C. MEYER, Philadelphia.**

Whose Pianos they have always on hand, for sale and to rent.

**PIANOS FOR RENT.**

*New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the trade and professors of music.*

au14

**V. SQUARZA'S**

**PUNCH FACTORY.**

WE PRESENT HERewith THE PORTRAIT AND TRADE MARK OF the gentleman who heads this article. Mr. Squarza is favorably known in this State for his Anti-Divorce Liqueur and similar productions, as manufactured by him. We may mention that Mr. Squarza is an heir in the chemico-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,	Anisette,
Cognac do.	Whisky do.	Kirschwasser
Arac do.	Kirschwasser do.	Brandy Cocktail,
Anti-Divorce Punch,	Cocoa do.	Anti-Dyspepsia Bitters,
Coffee do.	do.	Appetizer,
Tea do.	Morning Comfort,	Ladies' Tears,
Pineapple do.	Kuemel,	

And CHAMPAGNES of all brands.

**Dr. Van Zandt,**  
**Consulting Physician and Surgeon,**

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity! Made Subservient for the Cure of all Nervous and Spinal Diseases.

**THAT THIS PRINCIPLE,** successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanting by physicians, to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

**Too Much Cannot Be Said**

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting, and in order that the tissue of the body should be susceptible to remedial agents we must first restore and

**Awaken the Magnetic Life Within Us.**

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

**No Compromise with Disease.**

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRICAL excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

**To the Ladies of California.**

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct views of the origin of all their maladies. Ladies can consult him with entire confidence, as he is no speculator upon human ills—but is proving himself the only number of the legitimate profession in California who really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately attuned nervous organism, together with their great sympathetic life, renders him doubly able to assuage those silent complainings which they bear so patiently and so long. No social disquietude need longer afflict our home circles; for he can arouse the stricken energies; restore the wonted tonicity of the body; awaken the melancholic and desponding; arrest those drains which cause so much anxiety; cure those protean maladies which have so long

**Baffled the Skill of Physicians.**

Develop appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength; extreme debility and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exciting the Electro-Galvanic current, together with his remedial measures which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore to usefulness, and spare you a blessing to your family and to society.

**All the World Over**

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is as necessary to restore the ELECTRO-GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and verified by hundreds of patients; so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unassailable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, menal and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or coarctate habit of body.

**None Need Despair of Relief.**

If you have ulcers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—depression of spirits which weigh you down—wakefulness that knows no sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you a radical removal of all bodily and mental infirmities, within the scope of science and man to remove.

**The Eye and Ear Diseases.**

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made these afflictions an especial study, and that he is the only Surgeon on our State, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataract, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29—3m

**FREDERICK KESMODEL,**

**Cutler and Surgical Instrument Maker**

**817 KEARNY STREET,**

Between Jackson and Washington streets,

SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

This attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are all uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL,

Inventor and Patentee.

ap8 tf



## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual loss was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

## For parting silver from gold when gold

is below 300-1000ths. fine. . . . . 3cts per oz.  
 " from 300-1000ths. to 750-1000ths fine. 7cts "  
 " " 750-1000ths to 950-1000ths " .14cts "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
 301 " 500, 7cts, " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

In regard to the deposits of *Washoe silver*, the rule will hereafter be, that the value of gold contained in the same will be paid in gold coin, and the value of silver in silver coin. The value of the silver will be calculated at \$1.21 per standard oz., and is exempted from the coinage charge, unless deposited for silver dollars, in which case a charge of  $\frac{1}{2}$  per cent. will be made additional. Bullion of the above denomination will be entered on the gold and silver register, as most congruous with the physical aspects of the material, but in the warrant it must be marked that so much is to be paid in gold and so much in silver, according to the contents reported by the assayer. The above rules, and charges were promulgated on July 10th, by Superintendent Robert J. Stevens.

U. S. BRANCH MINT, Nov. 6th, 1861.

On and after the 15th inst., a charge varying in accordance and the character of the deposit, from half a cent to three cents per oz., gross, in addition to the general rates, and be imposed on all bullion deposited for coinage or manufacture, which will require toughening or extra refining to render it suitable for mint purposes.

ROBT. J. STEVENS, Superintendent.

## Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent Right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

PACIFIC PATENT AGENCY. . . . J. SILVEESMITH,  
 SOLICITOR.

## MINING AND SCIENTIFIC PRESS.

## THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers—Four Dollars per annum.

## Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80

Names can be sent in at different times and from different Post-offices

Specimen copies will be sent gratis to any part of the country.

## W. B. EWER, Publisher,

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

A Circular containing further information, and a synopsis of the Patent Laws of various countries, will be furnished on application to J. Silveesmith, Government House, San Francisco.

Miners, Inventors, Agriculturalists, Capitalist and Mechanics, will find it to their advantage to subscribe for the MINING AND SCIENTIFIC PRESS—being the only journal of that class published upon this continent. Issued every Saturday at four dollars per annum.

Address, J. SILVEESMITH,  
 SAN FRANCISCO.

## MUSIC! MUSIC!! MUSIC!!!

A. KOKLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise.

Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c., &c.

Light's New Patent Insulated Iron Frame is put into all of  
 Light & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to  
 their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

cc7

A. KOKLER, Agent.

## CORN AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skilful and scientific Professors of Philadelphia, and having made this branch of surgical science my speciality for nine years, enables me to operate skilfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can recommend you with confidence to the citizens of San Francisco, as one of the most skilful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertion in the new and growing city of the Pacific.

We subscribe ourselves yours,

Rev W. Stanton, L L D,

Richard A Vaux,

Dr Straud, M D,

Wm H Mills, M D,

Cleopole Stevens, M D,

Samuel Patcost, M D,

Walter C Foster, M D,

S W Howard, Att'y at Law,

Pierce Butler,

Henry B Linton, M D,

Wm L Howard, M D,

Philippe Lidy, M D,

Myers Davis, M D,

W M Thompson, M D, and others.

No. 718 Catherine street—this is to certify that Dr. Kennedy has removed corns and bunions off my feet, which have annoyed me for years. He also removed a cancer from my middle finger, which I had no use of for a period of six months. I cordially commend him to the suffering humanity of Philadelphia as a skilful surgeon.

MRS. J. W. HAMMOND.

## REFERENCES:

John Corbett, M D,

Capt McClure,

Wm H Mills, Jr,

Rev Walter W Stanton, LLD,

Samuel W Howard, Att'y at Law,

Cleopole Stevens, Pharmacist,

Mrs Smith, Greene street,

Mrs W L Howard,

Walter C Foster, Com Mer, Third st,

Myers Davis, Market st, above Fifth,

Major Comstock,

Mrs W. Patridge, Walnut street,

From Dr. W. L. Stevens: Dr. Kennedy has operated upon my feet, and has effectually cured me of some torturing pests that I have been annoyed with for years.

From the Rev. Walter M. Thompson: This is to certify that while sojourning in Philadelphia, Dr. Kennedy has operated on three of my family to my entire satisfaction.

From the Hon. Wm. M. Thorn, ex-member of the Ohio Legislature: This is to certify that I called on Dr. Kennedy to operate on my feet: He displayed great skill as a surgeon, and I am satisfied that he has effectually cured me of those torturing pests which have annoyed me for many years.

From Geo. F. Omerly, 637 Arch street: This is to certify that I called on Dr. Kennedy. He has operated on my feet to my entire satisfaction. au21





A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, SATURDAY, DECEMBER 20, 1862.

NO. 8.

#### Practical Information for Working Miners.

In our last issue, we gave, under the above head, certain rules by which working miners, and amateur prospectors, might, with the blowpipe, determine the character of the minerals upon which they were operating. We had intended to have prefaced those rules with a few practical hints in regard to the use of the blowpipe, but neglected to do so until it was too late for that week. We supply the omission now.

In using the blowpipe the flame of a lamp, candle, or gas may be used. The best flame is that by a lamp with a large wick fed with olive oil. The smaller end of the blowpipe should be placed within the flame, and, the wick should be slightly bent in the direction of the flame.

"The blowpipe flame consists of two cones; an inner of a blue color, and an outer, yellow. The heat is most intense just beyond the extremity of the blue flame. The inner flame is called the *reduction* flame, and the outer the *oxydation* flame. A mineral reduced to the metallic state by the inner, may often be oxydized, or combined with oxygen, in the outer flame, where it is in contact with the atmosphere. For oxydation, the beak of the blowpipe should have a large aperture, and the wick of the lamp should also be large; the heat usually requisite is that of incipient redness."

To support the mineral in the flame, a piece of charcoal is generally used—the coal being carefully selected, well burnt, but firm; that from pine wood being the best, as it burns with the least ashes. A small cavity should be cut in the surface, barely sufficient to receive the substance to be acted upon—which should never exceed, in bulk the size of a pea. Sometimes the substances to be acted upon are of such a nature that they will sink into and blend with the coal; in such cases a metallic substance, as of copper, silver, gold, or best of all, platina may be employed. Coal is always preferable when it can be used, as the carbon of that material greatly assists in intensifying the heat necessary for the desired reduction.

Many minerals remain unaltered before the blowpipe unless some substance is added to aid in the fusion or reduction. These substances are called fluxes; the most common and easily attainable of which, is borax.

From the above hints almost any person may, with a little practice, soon acquire considerable efficiency in the use of the blow pipe. Having become sufficiently expert in the use of this instrument as to decide upon the character of the mineral upon which he is operating, the amateur will naturally desire to carry his investigations a little farther, and ascertain the *proportion* of metal contained in the ore upon which he may be operating. This may be ascertained in the case of any material which yields a regulus—the button of pure metal, which, in the melting of ore, falls to the bottom of the crucible) and by an instrument so simple, that any person may make one for himself. Of course, it is always better that the prospector should be provided with the proper instruments, which may always be obtained in any considerable city in the country. But we are, just now, writing for the prospector, who may be at a distance from such

facilities, and who, of course, must be thrown on his own resources.

#### HOW TO ASCERTAIN THE PROPORTION OF METAL CONTAINED IN ANY QUANTITY OF ORE.

Take any common marsh reed, such as will yield a straight joint of eight or twelve inches in length—eight will answer very well. This joint should be carefully split, so as to form a trough through its whole length. Then take a narrow slip of very thin paper (that known as pony paper or bank post, is most suitable) the length of the piece of reed, and paste it upon a common carpenter's rule or any scale where the inches are marked off, (a scale of ten to the inch is better than eight.) It should be so pasted that, when dry, the divisions of the inch may be easily and correctly marked upon the paper with a fine pointed pen. Previous to marking off the inches, it were well to draw, with a rule, two parallel lines the length of the paper and about  $\frac{1}{8}$  of an inch apart, and between these lines mark the divisions of the inch. This done mark the centre division line with an 0 [zero]; then commence each way, right and left, and number every fourth line from the centre to the ends, thus:

The fourth line each way from the centre should be marked 10; the 8th, 20; the 12th, 30; the 16th, 40: &c.; and a slip of 10 in. long graduated into 10ths of an inch, we have on each arm 50 lines, or 125°, taking 4 lines for 10°, or 2½° each line. While the lines and numbers are drying, the exact centre of the reed trough may be ascertained, and marked right across by spots on the two edges. A line of gum-water, full  $\frac{1}{8}$  of an inch wide, is then laid with a camel's hair pencil, or any convenient instrument, along the hollow; and the paper being stripped from the rule (which it leaves easily), the graduated strip is cut out with scissors, and laid in the trough, with the mark 0 (zero) exactly in the centre. Being pressed close to the gummed reed, by passing the round end of a quill or any other convenient instrument along it, it graduates the trough from the centre to the end. The graduation is very true, if well managed, as the paper does not stretch with the gum-water, after being laid on the rule with paste.

A very fine needle is next to be procured and passed through a slip of cork, the width of the trough, about  $\frac{1}{8}$  of an inch square, and  $\frac{1}{8}$  thick. It should be passed through with care, so as to be quite straight. The cork should then be cut, until one edge of it fits into the trough, so that the needle shall bear on the edges, exactly in the spots that marked the centre, as it is of importance that the needle and trough be exactly at right angles to each other. The cork is now to be fixed in its place with gum-water, and, when fast dry, to be soldered down on each side with a small portion of any soft resinous cement, on the point of a wire or knitting-needle. A little cement being also applied in the same manner to the edges of the cork where the needle goes through, to give it firmness, the beam is finished. It may be balanced by paring the edges on the heaviest side, but accurate adjustment is needless, as it is subject to vary with the dampness or dryness of the air. The support on which it plays is a bit of tin-plate (or, in preference, brass plate),  $\frac{3}{8}$  of an inch long and 1 inch wide. The two ends are turned up square  $\frac{3}{8}$  of an inch, giving a base  $\frac{3}{8}$  of an inch wide, and two upright sides  $\frac{3}{8}$  high. The upper edges are then rubbed down smooth and square upon a Turkey stone, letting both edges bear on the stone together, that they may exactly correspond. For use, the beam is placed evenly in the support, with the needle resting across the edges. Being brought to an exact balance by a bit of writing paper, or any other substance placed on the lighter side, and moved toward the end until the equilibrium is produced, it

will turn with extreme delicacy—a bit of horse-hair,  $\frac{1}{8}$  of an inch long, being sufficient to bring it down freely.

This is used as follows:

A suitable portion for an assay, say 1 to 3 grains, of the mineral to be tried, is placed on one side of the beam, and counterpoised by a small weight, or any other substance on the other side: on No. 100 if the produce be required per cent. (but if per cwt., on No. 110), the assay piece being moved to or from the centre until the balance is adjusted. Its exact place on the beam being then noted, it is to be taken off and reduced in the usual manner. If it require roasting in a cupel, it may be balanced therein, but the cupel must be first heated red, that its weight may not change during the operation, and then be balanced by a separate weight from that which counterpoises the ore, and, is to be moved to indicate the changes in the assay; and, as in this case, the cupel must not be moved toward or from the centre, after being balanced, the powdered ore must be adjusted to its counterpoise weight, placed on 100, by taking out, or putting in a little, as the case may require, and not by moving, as when no cupel is used.

When the reduction is complete, and the particles of metal have been brought together into one bead it is allowed to cool, and then broken out of the soda (if any was used), is replaced on the beam precisely where it stood; or the loss or gain in roasting may be ascertained in the same manner. The counterpoise will now require to be moved toward the centre, in proportion to the loss of the assay. The number on which it stands, when the balance is restored, will give the produce per cent. or per cwt., according to the first position of the counterpoise.

A beam of this kind is described in the "Annals of Philosophy," a graduated thin slip of deal, the needle fixed on with sealing-wax; but this is rather troublesome to graduate, the polish of the needle is apt to be impaired by the heat, its greater weight also interferes with its delicacy, and a blowpipe bead is very apt to fall off its flat surface. On these accounts the reed beam is an improvement. Brass-plate is, however, where procurable, preferable to tin-plate for the supports; and, still much better, two straight bits of fine glass rod or tube, fixed with cement on the edges of a groove, in a piece of wood of the requisite dimensions.

In making the trough, it will be found most convenient for use if it should be made about a quarter of an inch wide in the centre and rounded away to an eighth of an inch at either end.

An equal weight of transparent glue and very strong vinegar, with one quart of alcohol and a very small quantity of alum, dissolved by means of a water-bath, is said, by M. Böttger, to make an excellent liquid-glue, very useful for uniting fragments of horn, pearl, shell, bone, etc.

**FORCE OF OCEAN SWELLS.**—Some idea of the tremendous power exerted by ocean swells may be inferred from the fact, as reported by Capt. Trask, who has recently returned from the wreck of the Golden Gate, that the massive bower anchor of that ship has been found driven high and dry upon the beach fully seven miles from the locality where the ship was burned! The only portion of the wreck remaining was the forward part of the steamer, just abaft the boilers. Capt. T. does not entertain the slightest idea that any portion of the treasure in the safe will ever be found. About \$300,000, probably in the possession of passengers, has been thrown upon the beach and appropriated by the natives.



## THE WATER BALANCE.

The Territorial *Enterprise* speaks as follows of an ingenious mode of raising ore from some of the shafts in that locality:—

A cheap mode of hoisting ore from the mines is found in the water balance, where a mine is so situated that this means can be employed, and there are doubtless places in the Territory offering conveniences for this plan of working. What is necessary, is a drain tunnel from the bottom of the main shaft, and a stream of an inch or two of water on the hill, that may be brought to the level of the top of the shaft. Having these requisites, two large tubs, or a tank, with whatever contrivance may be deemed most convenient and desirable for hoisting dirt, are suspended in the two compartments of the shaft, by a rope working over a large pulley. Supposing the dirt tub or car to be filled at the bottom of the shaft, the empty water tank is of course at the top. By means of a small hose or spout the water tank is filled till its weight overbalances that of the dirt tub; when, very naturally, the former descends and the latter rises. The dirt tub being emptied, the water in the tank at the opposite end of the rope and bottom of the shaft is drawn off, and flows away by a drain tunnel, allowing the dirt tub to descend to be again filled. Thus the operation goes on, *ad infinitum*, doing the required work at a very small working cost—neither is the first cost of the machinery more than a mere trifle in comparison with the cost of hoisting by steam machinery.

**COTTON AND TOBACCO IN ILLINOIS.**—This year, says the *Call*, has demonstrated beyond a doubt or question that the prairies of Illinois are completely adapted to the cotton plant, and that the climate presents no obstacles to its successful cultivation. Large fields were planted to cotton in April and May last, and they sufficiently matured before the frost came, to be gathered, yielding an average of three hundred pounds per acre. Samples show that the staple is of superior quality, fully equal to the best "upland" that is grown in the most favored cotton districts. Satisfied with the success of this year's planting, companies of gentlemen interested in developing the material prosperity of the State, and individual farmers, are making preparations to commence the cultivation of cotton on a greatly enlarged scale next season. The question of cotton cultivation in Illinois as a new source of wealth, is considered as settled. Estimates by the local papers give 20,000 bales as the yield of the State this year. The crop of tobacco in Illinois is unprecedentedly large. A correspondent says that as much as 2500 hds. will be shipped from Carbondale, a section on the Illinois Central Railroad; and that southern Illinois will send as much tobacco and hemp to market as the whole State of Kentucky. The millions of bushels of grain which the West exports furnish almost the sole medium of exchange for the staples and manufacturers of the old world, and until our political troubles are settled this must continue to be the case.

CONSIDERABLE quantities of cotton have been produced in New Jersey this year. The soil grows as much as 800 pounds to the acre. Before the invention of the cotton gin every New Jersey family raised its own cotton.

THE following method of cutting glass is given in the *Photographic News*, by Alex. Taylor: "In treating of glass, I may give you another way of cutting bottles, shades, or any glass vessel the neat thing you wish, and that is, to get a rod of iron heated to redness, and having filled your vessel the exact height you wish it to be cut, with oil of any kind, you proceed to very gradually dip the red-hot iron into the oil, which, heating all along the surface, suddenly the glass chips and cracks right round, when you can lift off the upper portion clean by the surface of the oil. This never fails, and many a couple of bell glasses have I made in this from a six-pound confection bottle."

THE TURPENTINE MANUFACTORY, to which we alluded in our last as having recently been established in Marysville, is, as we learn from the *Appeal*, owned by Messrs. Wait & Jacobson. The enterprise, thus far promises a complete success. The gum obtained from the foot hill nut-pine answers admirably, and can be easily obtained in sufficient quantities, though it may be necessary to employ Chinese labor to help gather it. The enterprising proprietors will be on hand to secure the premiums offered by the Agricultural Bounty Bill, namely: for the first 10 barrels of rosin made in the State, \$300; for the first 10 barrels of pitch, \$150; for the first 100 gallons of spirits of turpentine, \$250; for the first 1,000 gallons of spirits of turpentine, \$500.

**MUSTARD.**—There was lately shipped from San Francisco 320 bags of mustard seed. The wild article of this country is said to be superior to the best English, and the supply boundless.

## SAN FRANCISCO MINING NOTICES.

**CHARLES CANY MINING Co.**—An assessment of \$1 50 per share was levied on the stock of this Company, Dec. 14th, 1862, payable on or before January 14th, 1863, at office, 338 Montgomery St.

**LIVE OAK COPPER MINING Co.**—Office, Montgomery Block—An assessment of thirty cents per share was levied, Dec. 1st, 1862, payable in thirty days.

**NORTH POTOSI SILVER MINING Co.**—Annual meeting of Stockholders will be held on the first Monday in January, 1863.

An assessment of four dollars per share was levied on this Company, Dec. 11th, 1862, payable on or before January 16th, 1863, at office, Cor. Battery & Washington Sts.

**MEREDITH GOLD & SILVER MINING Co.**—An assessment of two and a half dollars per share (five dollars per ft) was levied by this Company, Dec. 11th, payable immediately, at office, 712 Montgomery St.

**RED, WHITE AND BLUE G. & S. M. Co.** levied an assessment of 25 cts per share, on the 10th of Dec. payable within thirty days, office cor. Pine and Montgomery Sts.

**BULLION G. & S. M. Co.**—The Stockholders are notified that they will hear something to their advantage by calling at the office of the Company, cor. Pine and Montgomery Sts.

**CEDAR HILL TUNNEL MINING Co.**—Annual Meeting of Stockholders will be held at office, No. 5, over Parrot & Co's Bank, on the 1st Thursday in January.

**SIERRA S. M. Co.** will sell at auction, shares on which arrears may be due on Monday, January 5th, by Duncan & Co.

**NORTON G. & S. M. Co.**—An assessment of two dollars per share was levied Nov. 25, payable on or before Dec. 30th, 1862, at office 522 Montgomery St.

**ADRIATIC G. & S. M. Co.** will hold its annual Meeting of Stockholders on Monday January 5th 1863, at No. 4, Amory Hall.

**WILLOW SPRINGS G. & S. M. Co.**—The annual meeting of Stockholders will be held at 224 Montgomery, on the 29th of December, for election of officers.

**BANNER G. & S. M. Co.** has been duly organized. All claims or interests not presented for examination at office, 522 Montgomery St., on or before Dec. 31st, 1862, will be forever barred.

The first annual meeting of the Stockholders of this Company will be held at their office, Dec. 24th, for the election of Trustees, etc.

**DIOS PADRE G. & S. M. Co.**—An assessment of three dollars per share was levied, Nov. 29th, payable on or before Jan. 1st, 1863, at office 502 Montgomery St.

**EMMETT G. & S. M. Co.**—An assessment of twenty-five cents per share was levied, Nov. 21st and is now due, and payable at office 326 Clay St.

**VIBBARD G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office 326 Clay St.

**DOYLE G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office No. 326 Clay St.

**LIVINGSTON G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due and payable at office No. 326 Clay St.

**ISAAC'S G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due and payable at office No. 326 Clay St.

**KOHLER G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now payable at office 326 Clay St.

**EL DORADO G. & S. M. Co.**—An assessment of one dollar per share was levied, Dec. 1st, and payable at office, on N. E. cor. of California and Montgomery Sts., or to Superintendent in Virginia City.

**IOWA MINING Co.**—An assessment of Four Dollars per share was levied, Dec. 4th, payable at office 522 Montgomery St. on, or before Jan. 3d, 1863.

**JOSEPHINE MINING Co.**—An assessment of two dollars per share was levied, Nov. 19th, and is now due and payable at office No. 21 Stephenson House.

**BURNSIDE S. M. Co.**—An assessment of one dollar per share was levied, Nov. 17th, payable within 30 days, at office 712 Montgomery St.

**CALEDONIA G. & S. M. Co.**—An assessment of 20 cents per share has been levied by order of Trustees, and all Stockholders neglecting to pay on or before Dec. 22d, will have Stock sold to pay the same on that day, in front of the Post Office, Gold Hill. Office 412 Front St.

**HAWLEY MINING Co.**—An assessment of 50 cents per share was levied, Nov. 15th, payable at once, at office 204 Front St.

**AMERICAN QUICKSILVER MINING Co.**—An assessment of one dollar per share was levied, Dec. 16th, payable at Company's Office, in Petaluma, within 30 days—At the expiration of which time delinquent Stock will be sold.

**NAPOLION COPPER MINING Co.**—The first annual meeting of this Company will be held at office N. E. corner of Sacramento and Montgomery Sts., on Monday, January 12th 1863, at 8 P. M.

**MADISON G. & S. M. Co.**—The books of this Company are open for issuance and transfer of Stock, at 608 Merchant St.

An assessment of two dollars per share was levied on the Stock of this Company, Nov. 13th, payable at once.

**BURNING MOSCOW S. M. Co.**—An assessment of Two Dollars per share was levied, Nov. 25, for the purpose of defraying expenses of steam pump and machinery now being erected to drain the mine. Prompt payment is requested at the Company's office, corner of Montgomery and Jackson Sts., to Jas. P. Nourse, Sec.

The regular quarterly meeting of this Company will be held at the Company's office, on Wednesday, Dec. 24th 1862.

## WASHOE MINING NOTICES.

**POORMAN G. & S. M. Co.**—An assessment of Five Dollars per share was levied, Nov. 9th, and another of Ten Dollars per share, Nov. 21, payable at once to the Secretary, R. J. Michel.

**COLEDONIA TUNNEL AND MINING Co.**—An assessment of Thirty-two Dollars per share was levied, Dec. 8th, payable immediately to the Secretary, Martin White.

**THE CHIMNEY ROCK Co.**, lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Beach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

**LA CROSSE MINING Co.**—An assessment of \$1 25 per share was levied, Dec. 8th, payable at office 73 O Street, Virginia City.

**HAWK EYE SILVER MINING Co.**—An assessment of 25 cents per foot was levied, Dec. 6th, payable immediately to S. A. Kellogg, Sec. Gold Hill.

**ASHLAND G. & S. M. Co.**—An assessment of fifty cents per share was levied, Dec. 10, payable at the office of M. J. Power, Sec., B. St.

**INDEPENDENT G. & S. M. Co.**—The annual meeting of this Company, for electing officers, will be held at Galena, on the first Monday in January.

**THE SIERRA NEVADA SILVER MINING Co.** advertise in the Territorial *Enterprise*, 1042 shares of stock for sale for assessments, on Monday, Dec. 29th. Shareholders will do well to look to their interests.

**UNION COMPANY, GOLD HILL.**—An assessment of fifty cents per foot has been levied, payable at the rate of ten cents per foot, Nov. 15, 22, 29; Dec 6, and 13, at the Company's office, Gold Hill.

**MARTIN WHITE MINING COMPANY.**—An assessment of ten cents per foot has been levied, payable to the Secretary, at office on O Street, Virginia City.

**NORMAN SILVER MINING Co.**—An assessment of One Dollar per share was levied, Nov. 19th, payable on or before Dec. 31st, to the Superintendent in Virginia City, or at the office, No. 40, Montgomery Street, San Francisco.

**THE SWEENEY Co., Gold Hill,** give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

**MOHEGAN Co., Cedar Hill.**—An assessment of fifty cents per foot was levied, Dec. 5th, payable forthwith, to the Secretary at Virginia City.

**ORIENTAL G. & S. M. Co.**—The 3d assessment of 15 cents per foot, was levied, Dec. 8th, and is payable at office, No. 31, O Street, Virginia City.

## ESMERALDA MINING NOTICES.

**THE ZENOBIA LODGE COMPANY,** give notice that they claim a superior title to the Johnson Co., claiming the same ground so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder.

**BROOMS.**—The California *Farmer*, says there were manufactured in this State last year 480,000 brooms, worth \$150,000.

**SOLVENT FOR OLD PUTTY AND PAINT.**—Soft soap mixed with solution of potash or caustic soda; or pearl ash and slacked lime mixed with sufficient water to form a paste. Either of these laid on with an old brush or rag, and left for some hours, will render it easily removable.



TO MINING COMPANIES.

We earnestly solicit from mining companies and associations the following blank statement, filled according to the data hereby accompanying. The purpose for which we seek this information is important to every citizen and stockholder on this coast; it would also be productive of beneficial results—i. e., inducing capitalists to invest in our mining operations, thereby infusing new life and vigor into business generally in our States and Territories. Little, if anything, is known of our metallic wealth in Europe or the Eastern States, hence we desire as much of the blank filled by you as may be interesting and instructive to the people of this State and those interested abroad.

We know of no mining district in Europe or America where this kind of information is not willingly rendered by parties owning property of this nature; and we know of no better medium for making public the richness of our mines. We shall send blanks to mine and mill proprietors for every quarter, and will gladly publish the contents for the information of the community:

Name of Company and names of officers for the year.	Amount of stock & value per share.	When incorporated

Location.	Average assays of ore.	Process employed and number of stamps.	General remarks.

PALMER, HANSCOMB & CO.,

Golden State Foundry and Machine Works,  
First Street, near Market, San Francisco, Cal.

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications. Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast.  
San Francisco, November 29, 1862. 3m

Attention! Attention!

TRACT OF LAND, EMBRACING AN AREA OF 400 ACRES, HAS RECENTLY been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey" and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the lot for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it is in the natural progress of improvement soon to be in great demand for use of residence. That this property will increase in value, is as certain as the future of San Francisco. Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the rapid increase of our population. Invest in Real Estate, and you will find it more profitable than investing in old-cut mining stock, or loaning money that may be paid in depreciated coin. Prices for lots in the above tract will remain uniform until after the year—that is, without interest. The title to the land is perfect. Further particulars apply to  
HARVEY S. BROWN,  
No. 19 Naglee's Building.  
Graphic Maps can be seen and had at the above named office.  
6mo

DEETKEN'S  
Chemical and Metallurgical Works,  
SAN BRUNO ROAD, ISLAIS CREEK,  
SAN FRANCISCO.

GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at \$10 to \$100, it desired by mill owners. No power nor clean water for the purpose. nov8-3m

JULIUS SILVERSMITH,  
ASSIGNOR FOR NEVADA TERRITORY.  
OFFICE, IN LATE STATE CAPITOL,  
Battery & Washington sts., Room 23, up stairs.

RESPECTFULLY SOLICIT FROM THOSE WHO HAVE BUSINESS with the above named Territory, a share of their patronage, by requiring the official action of a Commissioner—such as affidavits, acknowledgments, the taking of testimony, etc.

W. T. & J. GARRATT,  
CITY  
BR & BELL FOUNDERS,  
1st & Market sts., opp. Oriental Hotel,  
SAN FRANCISCO.

BABE CASTINGS, FIRE ENGINES, FORCE AND LIFT PUMPS, and all kinds of Machinery, including Bellows, Hand Bells and Gongs, Hoses, Gauges, Cylinders, Oil Globes, Steam Whistles, HYDRANTS, and NOZZLES for MINING PURPOSES, Iron steam pipe fittings, &c., &c., COUPLING JOINTS of ALL SIZES. Manufacturers of "Garratt's Improved Journal Metal."

LEANDER RANSOM,  
CIVIL ENGINEER  
AND SURVEYOR.

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO, STATE LOCATING AGENT.

And as such having the sale of  
600,000 ACRES OF THE STATE SCHOOL LANDS,  
At the low price of \$1.25 per Acre.

TERMS—Twenty per cent in cash, and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

AGENCY FOR PATENTS.—The undersigned having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Patents and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, (late City and County Assessor.)  
REAL ESTATE AGENT,  
410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, LOANS NEGOTIATED

Washoe Stock Exchange,  
N. E. cor. Montgomery and Merchant sts.,  
SAN FRANCISCO.

L. W. NEWELL & CO.,  
Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.  
sep20

THEODOR KALLENBERG,  
MAKER OF MODELS  
for Inventors,

MACHINES, MATHEMATICAL Optical and Philosophical Instruments  
Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to. au7.3m  
(No. 4 Sansome street, corner Market, San Francisco.)

DEVOE & CO.'S  
STEAM ENGINE  
—AND—  
MACHINE WORKS,  
Corner Market & Fremont streets, San Francisco.

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILL Irons, Flour Mills, Quartz Mills, etc., etc., made to order and repaired.

ALSO,  
BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT Cutting  
AGRICULTURAL MACHINERY of all kinds made and repaired.

Duplicate parts of Threshing and Reaping Machines and Threshing Teeth made to order, on the most reasonable terms.  
Steam Engines and Boilers constantly on hand, and for sale cheap. Screw-Cutting Turning Lathes for sale. jeh18 DEVOE & CO.

LATEST IMPROVEMENT  
In LADIES' BUCKLES.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address,  
FREDERIK REICHEL,  
Manufacturing Jeweler,  
620 Merchant street, San Francisco. sep11

THE...  
NEW ENGLAND SEWING MACHINE for \$25!

THIS MACHINE stands confessedly at the head of everything now before the public. In cheapness, neatness, compactness, durability and beauty, it has no rival. It is made with special reference to the wants of a family, and any one with the aid of the printed directions can learn to work it successfully in a few hours. It will work from leather to the finest cambric without the change of needle, tension, or feed. It gives the best satisfaction where it is sold, and all who use or examine pronounce it better adapted to meet the wants of every family than any other machine now offered to the public. Gauge and hammer attached.

Every machine warranted, and kept in order free of charge. This is the only cheap machine that will do all kinds of family sewing.

STEWART & SHEAR, General Agents,  
No. 60 Second street. sep11

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T. my28

THE FOLLOWING GOODS TO BE FOUND AT  
H. D. PEARCE'S:

Gents' Heavy Gold Cases, different patterns;  
Ladies' Heavy Gold Cases, do do;  
Gold Telescopic Pen and Pencil Case;  
Extension Screw, Heavy Silver, for Gents';  
Extension Screw, Heavy Silver, for Ladies';  
Silver Extension Cases;  
Silver Telescopic Cases;  
Screw, Silver and Ebony Desk Holders;  
Slide Silver and Ebony Desk Holders;  
Reverse Silver and Ebony Desk Holders;  
Pen Holders, Silver and Ebony;  
Pen Holders, Gold and Ebony;  
Pen Holders, Gold and Ivory;  
India Rubber Propelling Pen and Pencil Cases  
India Rubber Propelling Pencils, short.

All the above goods are made to order and warranted; will be sold cheap for cash. There are some thirty different patterns, leaving an opportunity for parties to select and be suited.

A cheaper class of Pens direct from New York, at wholesale only.

Gold Pens constantly on hand. Gold Pens repaired.  
au7 H. D. PEARCE,  
606 Montgomery street, between Clay and Merchant, up stairs

GREAT REDUCTION  
IN PRICES.

STANFORD BROTHERS,  
121, 123 and 125 California Street,  
KEEP THE LARGEST STOCK OF ALL KINDS

OF  
Lamp Stock,  
And will Sell Cheaper than any House in this State

LAMPS,  
CHIMNEYS,  
WICKS,  
CAMPFIRE,  
BURNING FLUID,  
ALCOHOL,  
TURPENTINE,  
COAL OIL,  
KEROSENE OIL,  
COMET ILLUMINATING OIL.  
SPERM OIL,  
LARD OIL,  
MACHINERY OIL,  
RAPE SEED OIL,  
CHINA NUT OIL,  
LINSEED OIL, Raw and Boiled,  
POLAR OIL,  
SHARK'S OIL,  
NEATSFOOT OIL,  
TANNER'S OIL,  
&c., &c., &c.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. ap1867

PHILADELPHIA BREWERY,  
Second street, corner of Folsom, San Francisco, Cal.  
Hoelscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom—where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom. Nov9.

FULTON FOUNDRY AND IRON WORKS.

HINCKLEY & CO.,  
MANUFACTURERS OF STEAM ENGINES,  
Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings,  
Mining Pumps, and all kinds of Machinery,  
Amalgamators, Etc., Etc.  
47 & 49 First Street,  
BET. MARKET AND MISSION, SAN FRANCISCO

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to Iron when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.

D. B. HINCKLEY WM. E. WORTH. WM. A. FIELD

SQUARZA'S PUNCH.

HOME MANUFACTORY.

WHOLESALE AND RETAIL,  
No. 44 Leidesdorff street, near Sacramento st.  
Branch at 406 Montgomery street. my30

S. ROSENBAUM & CO.—Importers of pure Havana Cigars, Tobacco, etc., corner Clay and Battery, 25 and 27 Cedar street, New York.



## Mining and Scientific Press.

W. B. EWER, Editor.

SATURDAY ..... DECEMBER 20, 1862.

The MINING AND SCIENTIFIC PRESS is published at the Federal Building, Room 24, corner of Battery and Washington streets San Francisco, Cal. at Fifty Cents per month, or \$4 per annum, in advance. Advertisements, Fifty Cents per line. A liberal discount made to quarterly advertisers.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING, Designs of every description—Buildings, Sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates.

PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspapers in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## PROPOSED TAXATION OF THE MINES.

It is well known that a strong effort is being made by some of the leading politicians at Washington, to place a tax upon the mines of the Pacific Coast. The Secretary of the Interior, Mr. Chase, is in favor of either a tax or sale, and in a recent conversation with our representative, Mr. Sargent, as detailed in the Washington correspondence of the Sacramento Union, expressed his opinion that the mines of California could be made to pay the entire debt of the Union. Mr. Sargent urged upon the attention of the Hon. Secretary the manifest injustice of compelling any one interest to be especially taxed for such a purpose. The Secretary was evidently disturbed in his preconceived notions of mining taxation, by the cogent arguments of our representative, and finally referred him to Judge Edmonds, Commissioner of the Land Office, who has been deputed by the Secretary to collect information upon this important matter. The decision of Judge Edmonds will be final so far as the advisory power of the Department is concerned.

Mr. Sargent, with his usual alacrity, lost no time in presenting himself before the Judge, with whom he had a most interesting and important conversation of some hours duration, the result of which was an evident modification of the Commissioner's views upon the matter, and a full agreement upon the two following important propositions:—

First,—That no action of the Government ought to be had by which those now in possession of mining claims, developed by their labor or capital, or purchased by them, should be deprived of their rights.

Second,—That no system ought to be inaugurated that will lessen the production of gold, or be burdensome to the miners.

The Commissioner further agreed that no system of sale should be recommended which would allow the mines to fall into the hands of speculators. He expressed a desire to foster the mining interest on its present basis, at least so far as to enable men of small means to engage in it, as now. He favored the idea of a license system, or percentage on the gross product. Mr Sargent promptly urged the injustice and impolicy of taxing anything more than the net profits, and also reminded the Commissioner that even that was now reached by the three per cent income tax. That fact did not appear to have been previously comprehended by the Commissioner! He remarked, however, that it should be considered.

As the Commissioner was inflexible in the opinion that the mines must be made to yield a special revenue, Mr. Sargent made it his chief aim to effect, to the greatest possible extent, a modification of the measures to be proposed for the action of Congress. Having accomplished what he could directly, he then urged upon the Commissioner the propriety, before coming to any final conclusion in the premises, of paying a visit to California, and making a personal examination of the mines, and mingling and conversing freely with the miners themselves and our people generally, and thus learning for himself the peculiar and anomalous condition of our mining community. The necessity of such a trip

to arrive at a correct knowledge as a basis upon which to act in so important a matter, appears to have been most successfully urged, as the Commissioner is reported, in his reply, to have expressed himself favorably as to the proposition; hence we may reasonably expect a visit from him at an early day, and rely with much confidence upon the presumption that no legislation with regard to the mines will be advised by the Government, until the matter has been thoroughly enquired into.

The reported action of Senator Latham, elsewhere referred to in our issue, to-day, will not be likely to result in anything definite during this pendency of the proposed advisory action of the Government. Too much credit cannot be awarded to our vigilant mining representative, for the energy and diligence he uniformly displays in looking after the interests of his constituents.

**TUNNELING IN WASHOE.**—Deep tunnelling and other heavy enterprises are becoming quite common in Washoe, in connection with operations hitherto considered of doubtful value, while, at the same time the old tunnels are being pushed forward with renewed vigor. The Gould and Curry tunnel has now been driven in 1,350 feet—to midway between B and C Street. Two thirds of this distance is through rock which does not require timbering. The ground is now getting soft and wet, and the drifters are evidently approaching the main Comstock Lead, which the engineers expect to reach within 150 feet and at a depth of 550 feet below the surface. Important developments are expected to be made when this work is completed. The Latrobe tunnel is progressing at fair speed, the ground becoming softer as the drifters advance. The Mount Davidson Company are still at work, and the long tunnel of the El Dorado, immediately south of the Mount Davidson, it is said will be pushed to the Montour Ledge, inside of three months. Work upon the Cedar Hill tunnel is also being vigorously prosecuted, and large expectations of important results are freely indulged in.

The old Whitman Tunnel, in the Palmyra District, upon which work has been suspended for several months, is again resonant with the sound of the pick and hammer. This tunnel was driven to the distance of about 1500 feet, over one year ago, when work was suspended in consequence of the ledge which was struck being somewhat broken and of doubtful value. Since work has been recommenced, the drifters have found better ore. They are now taking out rock which is said to pay at the rate of \$100 in silver to the ton, and are in daily expectation from present appearances of something better. The silver exists here in the chloride and sulphate form, and in patches, not being found pure, or intermixed with gold.

**COAL AND IRON IN ESMERALDA.**—E. M. Smith and J. F. McFarland, formerly of Stockton, but at present largely interested in mining operations on the other side of the mountains, have presented the Editor of the Sonora Flag with specimens of the coal and iron from the Juniata mines at Esmeralda, in which they are interested. The iron ore is a protoxide, a very rich and rare ore. These gentlemen assure us that there is a whole mountain of this ore on their company's claim. The coal, as it is called, in our opinion, is a sort of petrified mineral pitch. It is very inflammable, and generates a great heat. Its discovery in that section of the State is most opportune. The Juniata Coal Mining Company, organized to work this new discovery, is regularly incorporated, with a capital stock of \$500,000. Of this Company, C. W. Kendall, F. Goodell and Albert Mack, all old residents of Tuolumne county, are the Trustees.

THE Journal of the Franklin Institute states, that "by incorporating into melted steel from two to five per cent. of Tungsten, there is obtained a steel which is, very dense, hard, and strong—admirably fitted for the manufacture of tools. The instruments made with this Tungsten steel are said to keep their temper four times as long as usual."

**MINING STOCK SALE.**—A sale of 1042 shares of Stock in the Sierra Nevada Silver Mining Company, is advertised, in the Territorial Enterprise, for sale to pay assessments to the amount of \$10,211. The Stock belongs to 57 different persons and will be sold on Monday, Dec 29, by John Middleton, at the Company's office, No. 40, Montgomery street.

## INTERESTING EXPERIMENTS IN QUARTZ MINING.

A Mr. Porter, engaged in quartz mining at Italian Gulley, near Ballarat. New South Wales has been experimenting upon tailings from his mill in the following manner. He placed 76 lbs. of quicksilver in the bottom of a large retort, and then placed upon the quicksilver 225 lbs of tailings. The retort was then carefully closed, and placed upon a furnace till the quicksilver was all vaporized. It is argued that in this manner the quicksilver is brought into immediate contact with every particle of gold which was contained in the sand. The result alleged to have been obtained from this experiment was so great, that, it is claimed if the same can be obtained on tons as was here secured on hundred weight, it will be difficult to give even an approximate estimate of the increase to which the production of gold from quartz may be carried. At all events the excitement was so great, in the immediate neighborhood, as to cause a perceptible advance in the price of quicksilver! This experiment was announced in the London (Eng.) Mechanics Magazine, nearly a year ago. Whether it has resulted in any practical utility by experiments on a larger scale, we are not informed.

It is a fact, however, quite patent to all engaged in extracting gold from quartz, that a very large percentage of the precious metal is lost in the bungling processes generally employed in California, even in the most approved mills and plans for working gold quartz. During a recent visit to Grass Valley, in Nevada county, we were placed in possession of certain alleged facts, which, if correct, are certainly of the greatest importance.

While we were there the mill which has recently been fitted up in that place for working silver was made in readiness for running. The proprietors, before putting in any the silver ore concluded to run it for a day upon some red rock, which lay near by, and was supposed to contain but small quantity of gold. The rock was known to be such would not pay for crushing in the ordinary way for working gold; as a considerable quantity of precisely the same of rock had been already crushed with a yield below the average rate. It was thought, however, that there might be gold enough in it to charge the quicksilver, at least it would serve to scour up the pans, etc., and put the rock in good order to receive the rich ore which they were intended to work from the newly discovered silver mines. Eight tons were put through the mill, and to the amount of every one, when the pans were cleaned up they exceeded \$35 to the ton! We were assured that this could be no mistake in the correctness of this experiment, and results since obtained from similar rock from the vein, whence the poor rock above alluded to was taken, fully verified the first result. If there is no mistake in regard to this experiment, we are on the eve of the most important era in gold quartz mining yet attained, which will work a complete revolution in that branch of industry, in California, and bring into high value the leads throughout the State, which have hitherto been considered as entirely worthless. We hope soon to meet something still more definite in regard to the results obtained from the application of this new silver process to the working of gold.

This mill is fitted up for working with the Sedgwick process—a process, which, so far as we have heard, has never been used by any other than the Ophir mine, at Washoe; and although it has been considered, we who claim to have knowledge of it, as not altogether the best for silver, is nevertheless, we believe, acknowledged to be highly efficient for gold working. We can only estimate the extraordinary yield above alluded to as the result of its superior saving efficiency.

**GOULD & CURRY MINING COMPANY.**—At a meeting of the stockholders of the Gould & Curry Company, held on the 15th instant, the following were elected, viz: John O. Marl, Thomas Bell, Bull, A. T. Lawton, A. B. McCreavy, William M. de George Hearst. At a subsequent meeting of the Company Earl was elected President. The affairs of the Company were represented to be in a flourishing and prosperous condition.

**SILVER ORE.**—Eighty bags of Mexican ore was brought up by the Oregon on her last trip tested here.



## MINING NOTABILIA.

A correspondent from Grass Valley gives us encouraging reports of the progress of the work at the Grass Valley Silver Mines. The mill is kept constantly running with equally satisfactory results as those reported at the first "clean up." The Central Company were to have commenced raising rock on Monday last. The Green Horn Company is expecting to strike it richer than ever when they get up with their tunnel. The Stonewall Company, on another ledge, near by are driving a tunnel to strike their ledge about thirty feet below the surface. Our correspondent is sanguine in the belief that this new silver district will soon be developed to such an extent as to compare favourably with Washoe.

**FREMONT'S ESTATE.**—A recent telegraphic dispatch from St. Louis states that Fremont has negotiations on foot to sell his Mariposa Estate to a large New York Stock Company—and that he will receive a sum sufficient to pay off his debts and have a million or two to spare.

**THE WIDE WEST MINE.**—A correspondent of the S. F. News Letter has examined one and a half tons of ore from this mine, which appears to be very rich. It was to have been worked in a few days, with some four tons more then on the way to a mill. This crushing will probably fix the value of the mine, and prove whether or not, the indications of its fabulous richness are reliable. Other important developments are expected in that vicinity.

**MRS. HALL'S FURNACE.**—Mr. C. P. Duane, Agt. for Mrs. Hall, is now in Washoe and making arrangements for the erection, on a large scale, of one of these Furnaces, near Virginia City, when the practicability of this new invention will be fairly tested. By the usual modes of smelting ore now in use, about 100 bushels of coal are required to reduce a ton of ore. By this furnace it is claimed that the same work may be accomplished by the use of *six* bushels. Should but a small part of what is claimed for this invention be realized, it will prove, not only a fortune for the lady inventor, but a most valuable acquisition to California and the world.

**THE SHEBA MINE.**—A large specimen of silver ore from the Sheba Mine, Humboldt District, has been taken to Virginia City and placed on exhibition there. It is some three feet long, fifteen inches wide and ten inches thick, with veins of pure silver branching through it in various directions. Another specimen of nearly equal size and thickness, was also brought in. We trust the mine may ever continue to abound in just such specimens.

**NEW DEVELOPMENT.**—It is said that the Utah Company, Virginia City, have struck good rock. If this proves true, it will inspire new confidence in the extent of the Comstock ledge. This Company, it is pretty generally believed, are working on that ledge, which will no doubt, incite renewed energy in the development of claims lying between these and others known to be on the Comstock lead.

**MORE COAL.**—Another coal discovery is reported in Oregon, about eight miles from Jacksonville, on Stewarts Creek. The coal is said to be found there in great quantities.

**SINGULAR GOLD INDICATIONS.**—On the Hughes Claim, near Copperopolis, a kind of rock is found much resembling "clinker," a substance abundantly produced in furnaces where hard coal is used. Imbedded in this clinker like substance are found small globules of gold—the entire appearance, no doubt having been produced by intense subterranean heat.

## [COMMUNICATED.]

"NEMO ME IMPUNE LACESSIT."—If there is anything the soft headed editor of the Mountain Messenger requires it is what is commonly called "brains." We refer that individual to our list of subscribers of leading officials, merchants, manufacturers and professional men, as published in to-day's *Scientific Press*, who we assert are in every respect better qualified for thinking or reasoning, than the editor aforesaid. We advise him, that if his ill disposition will not allow him him to help a good cause, to refrain at least from trying to intimidate it. If we had many such sluggards as the quasi editor of the *Messenger*, California would indeed soon sink into insignificance. "*Nemo me impune lacessit.*" J. S.

**CHANGE OF PUBLICATION DAY.**—The Publication day of the *Press* will hereafter be on Monday instead of Saturday, as heretofore.

## A MINING BILL.

The telegraph has announced the fact that Senator Latham has introduced into Congress a Bill intended to govern all mining operations, whether in California or on the Eastern Slope. The announcement appears to have been quite unexpected in this state, and naturally enough, creates considerable curiosity if not an actual interest to know what may be the provisions of this new mining Bill. It is possible that this Bill may have for its object the raising of revenue merely, as contemplated by Secretary Chase, and elsewhere alluded to in our columns to-day, although the wording of the dispatch would seem to imply another object, referring more particularly to the internal police of the mines. Californians have ever expressed the desire that there should be no legislation regulating the mines on the Pacific Coast. We have got along very well for some ten or twelve years under the "Rules and Regulations" adopted in our various mining localities, and very satisfactorily interpreted by our courts. Perhaps Mr. Latham may have devised some new method of managing the complicated mining interests of the Pacific Coast, which shall exactly suit the wants and necessities of the people. But the miners are, at all events, desirous of learning upon what basis our distinguished Senator would hereafter place these interests, and in the absence of such knowledge are very fearful that, should any change in our policy be made, we shall all soon have occasion to regret that we had not "let well enough alone." To our comprehension it appears as though our national legislators had full enough to do without attempting to disturb a system which certainly works well for the time being and any interference with which, we greatly fear will result in nothing but mischief and disaster.

## THE OPHIR COMPANY.

The Ophir Company has closed with Garrison & Co., for the purchase of the Old Virginia Lead and the settlement of the pending suit between the two Companies. The Virginia City *Union* says that orders have been received in that place directing the agents of the Old Virginia Company to pass over to the Ophir Co., the stock, books, etc. of that concern. The Virginia is no doubt a valuable mine, and probably well worth the money to be paid, aside from the important consideration of a final settlement of all matters now in litigation or likely to come up hereafter as to adverse title.

The receipts of this Company for the year ending Dec. 1st, 1862, have been \$1,680,000. The working expenses of the mine, during the same period, has been \$746,000. Expenses for extension of milling works, \$80,000, supplies on hand \$250,000, cash in Treasury \$134,000.

At the annual meeting the stockholders held on the 8th inst., the following were elected as Trustees: Joseph Woodworth, Charles F. Lott, Donald Davidson; J. M. Livingston, A. E. Davis, Edward Martin and James W. White. At a meeting of the Trustees held subsequently, James W. White was elected President, and Thomas J. Lamb, Secretary.

**AMENDE HONORABLE.**—Several notices respecting mining affairs as published in the *Press* last week should have been credited to the Virginia City *Daily Union*, a very excellent and valuable Journal with Dr. Henry Degroot as its editor.

**THE COPPEROPOLIS RAILROAD.**—Fifty-fifty thousand one hundred dollars has been subscribed in Stockton to the capital stock of the Copperopolis Railroad.

Our imagination is likely to make our case worse or better than it is.

## Mining Stock Report.

SAN FRANCISCO, Dec. 19th, 1862.

The mining market at the present dates is steady with a moderate amount of business, including stocks. The passage of the Corporation Bill in the Nevada Legislature, and the probability of its receiving the governor's signature is beginning simply to effect low priced stocks.

Ophir shares are in demand, with but little stock in the market. Only 124 shares were reported in Sanborn's Circular, as sold last week, against 468 the week before. It can readily be disposed of for \$2500 to \$2650. At the Meeting of Stockholders, elsewhere noticed, an entire new board of Trustees was elected, with the exception of C. A. Lott, who is continued.

Gould & Curry still continues to advance and has finally reached the highest figure in the market, although it has not yet declared a dividend. It is firm at \$2600 cash.

Chollar still remains buoyant, having held its advance of last week and is

quite firm at \$350. Holders are confident of realizing \$100 advance on present quotations by the 1st of January next.

Central is quoted at \$1400—a slight depreciation.

California is quoted at \$1,200.

Potosi has been but little enquired for. Small transactions are quoted at from \$50 to \$75—a decline of \$20.

North Potosi is quoted at \$60—offered at \$7.

Sierra Nevada is quoted at from \$60 to \$75. 75 shares changed hands last week.

Daney is quoted at \$100 bid.—200 asked.

Burning Moscow is quoted at from \$80 to \$82½.

Mount Davidson—100 shares changed hands at from \$8 to \$8½—a slight advance.

Meredith is firm at \$20.

Burnside is quoted at \$16.

Iowa is quoted at \$130.

Norton is quoted at from \$13 to \$17—a slight falling off.

Sacramento is quoted at from \$20 to \$24—\$30 is asked.

Lucerno is not quoted.

Hale and Norcross is quoted at \$250—\$300 asked. In the Bulletin's Stock Report of yesterday it was quoted as sold at \$415—\$450 asked.

Rogers quoted at \$22½ bids—\$27 asked.

Lady Bryan—quoted at \$3.

## Esmeralda Stocks.

The Wide West is still advancing, and is quoted at from \$405 to \$415—\$420 is generally asked.

Antelope is quoted at \$100—with \$110 asked.

Atlas is not quoted. \$8 is asked.

Silver Hill is quoted this week at from 12 to 15 dollars—\$18 asked.

Utah has buyers at \$20—held at \$30.

Real Del Monte quoted at \$25 with \$30 asked. An advance of \$5.

## Coso Stocks.

The Josephine had bidders, the past week, at the Stock Board at from \$15 to \$15½—Holders asking \$20 to \$25.

Coso—\$20 asked.

Willow Springs—held at \$15.

## Mexican Mines.

St. Nicholas Silver Mining Co. is quoted by Sanborn's Circular at \$100.

Mina Prieta finds no recent buyers, but is held firm at \$110.

Dios Padre is quoted at from 30 to 33 dollars.

## WASHOE STOCK REPORT.

[Compiled from the Daily Territorial Enterprise.]

The stormy and threatening weather of last week, rendering our existence quite uncomfortable, seems also to have exerted a depressing influence on stock transactions. It is most probable, however, that the confidence which holders feel in the increasing value of the mines, generally, has more influence upon stocks than either the weather or the apprehensions of buyers. Prices are steadily advancing, and holders are firm, two facts which argue a healthy confidence in the substantial wealth of the principal mining operations now in process of development.

Deep tunnel and other heavy mining enterprises are becoming quite common in connection with explorations hitherto considered of doubtful value, while the old tunnels are being pushed forward with renewed vigor.

Very few of the sales now being quoted are at figures which fairly represent the value of the ground conveyed.

The Pride of the West is said to be taking out the best rock from their mine that has ever been struck in the Devil's G to District. This claim shows a degree of permanency which no other in that district has yet reached. Claims in Nigger Ravine, of this district, are beginning to attract considerable attention among buyers. Prospecting has again commenced here with renewed energy. Much of the stock, however, which is now crowding the market, from this locality, is not regarded with much favor, and few seem disposed to operate in it at any price. Two years ago the ledges of that district were largely dealt in, but developments, generally felt so far short of the general expectation, that capital now avoids the locality with almost too much severity.

Accounts from Palmyra continue to be of the most encouraging character. This District will, no doubt, prove a source of wealth to many who have long continued to prospect there with little encouragement.

One hundred and thirty feet of Humboldt stock sold, last week, at an average price of \$5.50, in small lots, ranging from ten to thirty feet.

Five Dollars is offered for Union, Gold Hill. The rock now being taken from this claim, is of a much better quality than any heretofore taken from their mine.

A small lot of Waterhouse sold at \$3.50.

Several small sales have taken place in Gold Hill at low figures.

The Nevada seems to be attracting less attention than heretofore, although favorable accounts continue to come in from those claims.

Caledonia is enquired for at low figures. This Company has struck a very formidable ledge in their tunnel, which is also being run for several other ledges, which are supposed to exist further into the hill.

The North American frequently changes hands among the members of the Company, though but little is offered for sale in the market.

Baltic is offered at \$25 per foot; Ashland at \$10; Zouave offered at \$10 but withdrawn.

Baltic and Uncle Sam have been in the market, the past week, at \$20; Cole at \$20; Oriental at \$4; Meredith at \$15; Sacramento is enquired for but none offered.

Santa Rita is in market at \$42, and El Dorado at \$65.

Cedar Hill Tunnel is offered at \$5.50; Dargan at \$4; Gov. Nye at 7.

There was but little demand for anything, the past week, although almost anything could have been sold at a trifle less than the rates asked.

The following stocks, not enumerated above, are in the market in Virginia City, and held at the figures annexed—

Santa Fe	25 00	Summit	36 00
Empire	6 00	Washington Leds	6 00
McBee	25 00	Milton	20 00
Beivider	15 00	Laboring	15 00
Poytona	25 00	Swezey	15 00
Dargan	4 50	Caledonia	8 00
El Dorado	70 00	St. George	3 00



## GIFTS, DONATIONS AND SUBSCRIPTIONS

To the work entitled "THE METALLIC AND AGRICULTURAL WEALTH OF THE PACIFIC STATES." The publisher desires to thank the several gentlemen whose names are hereto appended, for their munificence and aid in behalf of this important work.

Samuel Brannan, Esq., Citizen.  
John Parrot, Esq., Banker.  
Hyam Joseph, Esq., Citiz n.  
Ira P. Rankin, Esq., Collector of Customs.  
S. H. Parker, Esq., California Postal Agent.  
S. C. Bradshaw, Esq., Pacific Metallurgical Works.  
David Henriques, of the Board of Stock Brokers.  
Rev. Dr. E. Cohn.  
Rev. Dr. H. M. Bien.  
J. M. Mugarietta, Mexican Consul.  
H. Meyers, Citizen.  
Henry M. Hale, City and County Auditor.  
Dr. J. C. Tucker, of Steamer Moses Taylor.  
Dr. J. W. Van Zandt.  
James Hitchens, Supt of Willow Spring Mine.  
G. F. Deetken, Supt Metallurgical Works.  
E. Torres, Ex-Mexican Minister.  
M. Lebatard, Merchant, San Francisco.  
Greenberg & Mandel, "  
A. B. Stanford & Co., "  
J. Seligman & Co., "  
B. Hamburger, "  
Levy Strauss, "  
M. & J. Steinhart, "  
L. King, "  
S. Rosenblatt, "  
Herman Gerstung, "  
Henry Newstadter, "  
Uhlfelder & Cahn, "  
Wm. Meyer & Co., "  
Hecht Bro. & Co., "  
H. Cohn & Co., "  
Scholle Bro's, "  
I. Bluxome, Jr., "  
Lazard Freres, "  
Chas. A. Crane, Esq., "  
E. H. Washburn, Tax Collector, San Francisco,  
Jas W. Bingham, Clerk Board Supervisors, S. F.  
C. Bartlett, Clerk Probate Court, S. F.  
M. C. Blake, County Judge.  
Rev. Thos Starr King,  
Dr. L. C. Lane, M. A. Prof. Pac. University.  
John Levy of Braverman & Levy, Importers.  
Dr. J. B. Beers, Dentist,  
William Fell, Esq., of Nevada Territory,  
H. F. Teshmaka, Esq., Mayor, of San Francisco.  
Gen. R. M. Drum, Insp. Dep. of Pacific.  
R. B. Woodward, Proprietor of What Cheer House,  
Dr. S. W. Kellogg, of Kellogg, Hewston & Co.  
A. H. Houston, Contractor,  
Alsop & Co. Bankers,  
St Losky, Levy & Co, Tobaccoists,  
Macondry & Co, Commission Merchants,  
Thos N. Cazneau, Com. of Emigration,  
H. B. Platt of Platt's Music Hall,  
John J. Hucks, Manufacturers,  
Thos Baugh, Prop. Merchant's Exchange.  
E. Dupres, Broker, San Francisco,  
William Schmolz, Coiner, U. S. B. Mint,  
Robert J. Stevens, Supt. U. S. Branch Mint,  
Conrad Weigand, Assayer "  
Henry Baker, Cashier "  
W. B. Gould, Weigh Clerk, "  
Ogden Hoffman, U. S. District Judge,  
Wm. H. Sharp, U. S. District Attorney,  
Wm. H. Chevers, " Clerk,  
Harvey S. Brown, Attorney and Counsellor.  
F. A. Fabens, Esq. A. torn y.  
T. W. Park, Esq. "  
Byrne & Freelon, Attorneys & Counsellors,  
Harvey S. Brown, "  
Gregory Yale, " etc. etc. etc.

## DONAHUE'S

Union Iron and Brass Foundry,  
CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO, CALIFORNIA.

The First Established in the State.

**MANUFACTURE STEAM ENGINES, SAW AND GRIST**  
Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to any one desiring it, free of cost. PETER DONAHUE.

**TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts. m1**

**PALMER, HANSCOM & Co. Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market. my23**

**KELLY & WADE, Importers and Dealers in Paints, Oils, Turpentine, Etc Nos. 105 & 107 California street, Bet. Davis and Front. m16**

## Important Publication.

We have been favored, by the publisher, with the title page and prospectus of the quarto work entitled, "The Metallic and Agricultural Wealth of the Pacific States." The editor of this work has recently disposed of the "Mining and Scientific Press," with the view of devoting his entire attention to the publication of the work; to this end he is making arrangements for an early visit to the Atlantic States and Europe. The work if carried out according to the prospectus, will be one of the most valuable publications yet presented to the public, and will prove of incalculable benefit to California and the Pacific Coast generally, in bringing the immense mineral wealth of this region more prominently before the Capitalists of Europe. The object is a laudable one and ought to be encouraged. Mr. Silversmith is one of our oldest citizens and is well acquainted with the subjects of which he treats. He desires but little aid and that we trust he will readily obtain. The following is the prospectus:

## PROSPECTUS TO THE PEOPLE OF THE STATE OF CALIFORNIA, OREGON, AND ADJACENT TERRITORIES.

The Subscriber, one of your earliest citizens of California, and for the most of his time engaged as a journalist, and particularly of late in a journal devoted to the chief resources of the Pacific States, respectfully submits the following plan and proposition for the purpose of bringing hither from England, France and Germany the working classes, mechanics, artisans, miners, and metallurgists for the purpose of developing the resources of our thinly populated States and Territories, thereby reducing labor, the establishing of factories, the occupation of the millions of acres of arable land now lying dormant, and to work our mines. The benefits accruing to our Government—to marine conveyances—the merchant—the manufacturer, the mining companies and professional community, cannot but be beneficial, provided the facilities are offered to such emigrants, and according to the tenor of our laws governing such. For these purposes the subscriber desires to seek only the necessary or pecuniary aid to take him across the Pacific and Atlantic, so that he may be enabled to lay before the people of Europe a work which he has compiled from authentic sources, comprising the mineral wealth of the Pacific States, including partly Mexico, Lower California, British Columbia, etc., together with a synopsis of the climatology, agriculture, arts and manufactures, with interesting statistics of our imports exports, and population. Also, the organic acts of our State, the local and general laws governing mining, the Pre-emption Act, and kindred subjects pertaining to the Pacific States. The author reserving for himself the right of translation of this work (which has cost him three years of his time to collect and compile) in the German and French languages.

He contemplates making the tour to the Atlantic States and Europe in February or March, 1863, and will equip himself with the mineral materials, fossil remains, etc., and illustrate them by diagrams and discourses throughout the Atlantic States and Europe.

Such a work which your petitioner has in view cannot be published in this State without an extraordinary outlay, nor have we the materials, artists or skill in copperplate or wood engraving. The work will comprise from 400 to 500 pages, to be handsomely illustrated with colored plates, maps, etc., quarto form. The subscriber will add thereto a complete list of all the associations and companies, especially mining companies.

He goes to Europe for the purpose of seeing all the manufacturing places, machines and utensils, also to the leading mining districts and metallurgical establishments, to acquire from the best sources there the best mode of treating our rich minerals, and lay these several important features before our people through the Mining and Scientific Press, and the work he hereby offers. But the most important subject in his mission is the inducements he will offer to Europeans of our immensely rich mining fields and agricultural lands, together with the great advantages offered by a liberal and protective government for industrious citizens.

The subscriber, therefore, calls upon the citizens in the Pacific States who have the interests of our new States nearest their heart, to aid him in this grand but laudable undertaking with means. Each subscriber will be furnished with a copy of this work, which is designed to be useful in the counting house, to the professional man and miner. The author desires to state that whatever aid or subscription he may be furnished with by the people of this State he will refund after the publication of the work, or leave the amount to be taken out in books.

Respectfully submitted,

JULIUS SILVERSMITH.

## WRIGHT'S PICKS.



JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

je20

JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

## LEWIS COFFEY &amp; RISDON'S

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Locomotive Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work or the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner of Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal. J. N. RISDON

LEWIS COFFEY

## READ THIS!

**COAL OIL EXPLOSION.**—ON SATURDAY EVENING, WHILE MR. BREWER was engaged in the Summer street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences. (Evening Bulletin, Aug. 4.)

## THEN THIS!

**COMET ILLUMINATING OIL!**  
Manufactured expressly for Stanford Bros.

## THIS POPULAR

**BRAND OF KEROSENE**  
Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

**Best Family Oil in the Market**

STANFORD BROTHERS,

au14

Nos. 121, 123 and 125 California street.

**RECENT PATENTS.**—Granted to CALIFORNIA INVENTORS through the Pacific Patent Agency, J. SILVERSMITH, Solicitor:

**HERMAN CAMP.**—Patent for Quartz Crusher and Amalgamator.

**W. H. RICHARDSON.**—Patent granted for Washing Machine.

**E. E. MATTESON, Nevada:** Hydraulic Derrick. This invention has been illustrated in this journal, and has obtained great celebrity throughout the State.

**ELANDER HEATH, San Francisco.** Spiral Spine and Sage Mill. See "Mining and Scientific Press," June 4th, 1862, Vol. V., No. XIII.

**G. F. DEETKEN, formerly of Nevada:** Apparatus for separating Gold from Pyrites. This is one of the most useful inventions of the day. Mr. Deetken has successfully worked sulphurets for a number of years in Nevada county, professes to have obtained greater results than others engaged in the same occupation. Mr. D has recently established himself in this county, on the San Bruno Road, near the Islais Creek, where he has erected chemical and metallurgical works.

## Routes and Fares from San Francisco to Foreign and Domestic cities.

**Pacific Mail Steamship Company.**—Steamers leave for New York via Panama, on the 1st, 11th and 21st of each month. 1st cabin, \$250; 2d cabin, \$200; 3d cabin or steerage, \$100.

**Nicaragua Steamship line, Ross, Dempster & Co., agents.**—Steamers leave for New York via isthmus of Nicaragua, on the 21st October, and semi-monthly thereafter. Price of fare not yet stated.

To Portland, Victoria, &c., \$60. Crescent City, Trinidad, &c., \$20 \$30. San Diego, Monterey, and Los Angeles, \$20 to \$30. Sandwich Islands, per sailing vessels, \$100 to \$150. Australia, sailing vessels, 1st class, \$250 to \$300, China and Japan, sailing vessels, 1st class, \$200 to \$250. Mexico, \$30 to \$50.

**California Steam Navigation Company** dispatch steamers daily to—Sacramento, \$5; Stockton, \$4; Petauma, \$3.

**Overland Mail Company.**—Stages leave daily for St. Louis via Salt Lake; fare, \$200.

## THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and a proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hacknied course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone." "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consist ent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonable.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE.—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.



**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

#### FOR PANAMA,

The following Steamships will be dispatched in the month of December 1892  
" 20th—SONORA, W. F. Lapidge, Commander.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York  
For freight or passage, apply to

A. B. FORBES, Agent.

Je4

Corner of Sacramento and Leidesdorff sts.

#### REMOVAL.

**OFFICE OF THE PACIFIC METALLURGICAL WORKS**  
is removed to 318 California Street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.  
Gold and Silver ore, and Sulphuret Assayers, or Silversmiths' sweepings reduced or reclaimed.

**COPPER ORES**—Highest market rates advanced in cash, for shipments.  
S. C. BRADSHAW, Agent,  
318 California street, near Sansome, up stairs.

#### LABOR-SAVING

#### Rock Drilling Machines.

**TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRYMEN.**  
The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

HAND, HORSE, AND

#### STEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way.

A FOUR HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process.

Address orders to W. W. DENN,  
Oct-3m] Fremont street, bet. Market and Mission, San Francisco.

F. G. BEPLER,

#### PRACTICAL COPPERSMITH,

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery,

SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work.

All orders from the country promptly attended to.

Je6

#### 50 lbs. MARINE AND FIRE-PROOF PAINT

**MANUFACTURED BY THE PACIFIC METALLURGICAL WORKS, IN THIS CITY, for Hulls and Decks of Vessels, from ground Mineral Rock containing Arsenic, Copper, Litharge and six other Minerals.** When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

#### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

#### 25 lbs. Fire-Proof Paint,

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

#### DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil; if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead, mix with Linseed oil. Put it thick on a tin Roof, as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FORTGE, Superintendent.

WORKS, North Beach; Office, 318 California st.,  
SAN FRANCISCO

#### INTERNATIONAL HOTEL

Jackson street, a few doors above Montgomery, San Francisco.

The oldest Established First Class House in  
SAN FRANCISCO

FIRE-PROOF BRICK BUILDING.

FOSTER & COLEMAN, Proprietors.

Most convenient to the Steamers' Landings, business streets,  
and places of Amusement.

Open all night.

**NO DARK ROOMS! EVERY ROOM OPENS TO THE LIGHT AND AIR.**  
Every room is furnished with a first quality Patent Spring Bed and Hair Mattress, and are superior to any other Hotel in the State.  
The International offers to guests the greatest number and best furnished Family Rooms, and also sets the BEST TABLE OF ANY HOUSE IN THE CITY.

#### A. ROMAN & CO.

WHOLESALE AND RETAIL

#### BOOK ESTABLISHMENT.

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals. Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Piggot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Phelps.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Mitchell.

Liver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weisbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

Together with many other works in this & similar lines

Books Imported to order on short notice.

#### A. ROMAN & CO.,

417 & 419 Montgomery Street.

#### Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS. OR manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentee.)  
sept-3m] San Francisco.

#### Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen

Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an:

JUL. SILVERSMITH, Federal Building, Room 23.

#### RASCHE & SONS,

131 Montgomery street., bet. Bush and Sutter,  
SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

#### PIANOS, SHEET MUSIC

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;

T. GILBERT, Boston;

C. MEYER, Philadelphia.

Whose Pianos they have always on hand, for sale and to rent.

#### PIANOS FOR RENT.

New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the trade and professors of music.

au14

#### V. SQUARZA'S

#### PUNCH FACTORY.

WE PRESENT HEREWITH THE PORTRAIT AND TRADE MARK OF the gentleman who heads this article. Mr. Squarza is favorably known in this State for his Anti-Divorce Liqueur and similar productions, as manufactured by him. We may mention that Mr. Squarza is an expert in the chemo-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,	Anisette,
Cognac do.	Whisky do.	Kirschwasser,
Arae do.	Kirschwasser do.	Brandy Cocktail,
Anti-Divorce Punch,	Cocoa do.	Anti-Dyspepsia Bitters,
Coffee do.	—	Appetiser,
Tea do.	Morning Comfort,	Ladies' Tears.
Pineapple	Kuemmel,	

And CHAMPAGNES of all brands.

#### Dr. Van Zandt, Consulting Physician and Surgeon,

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity!  
Made Subservient for the Cure of all Nervous and Spinal Diseases.

**THAT THIS PRINCIPLE**, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanting by physicians, to add their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

#### Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equilibrium of health be broken, or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting, and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

#### Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

#### No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRIC excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

#### To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct views of the origin of all their maladies. Ladies can consult him with entire confidence, as he is no speculator upon human life—but is proving himself the only member of the legitimate profession in California who is really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately attuned nervous organism, together with their great sympathetic life, renders him doubly able to assuage those silent complaints which they bear so patiently and so long. No social disquietude need longer afflict our home circles; for he can arouse the stricken energies; restore the wasted energy of the body; awaken the melancholic and desponding; arrest those drains which cause so much anxiety; cure those protean maladies which have so long

#### Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength; extreme debility and listlessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exciting the Electro-Galvanic current, together with his remedial measures which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore you to usefulness, and spare you a blessing to your family and to society.

#### All the World Over

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is as necessary to restore the ELECTRO-GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and verified by hundreds of patients; so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unassailable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, mental and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or caustic habit of body,

#### None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—dissipation of spirits which weigh you down—wakefulness that knows no sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you a radical removal of all bodily and mental infirmities, within the scope of science and man to remove.

#### The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made these afflictions an especial study, and that he is the only Surgeon on our State, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataract, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29-3m

#### FREDERICK KESMODEL, Cutler and Surgical Instrument Maker

517 KEARNY STREET,

Between Jackson and Washington streets,

SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1893, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are all uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL,

Inventor and Patentee.

ap3 tf



## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual lost was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

## For parting silver from gold when gold

is below 300-1000ths. fine.....3cts per oz.  
 " from 300-1000ths. to 750-1000ths fine. 7cts " "  
 " " 750-1000ths to 950-1000ths " .14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
 301 " 500, 7cts. " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

In regard to the deposits of *Washoe silver*, the rule will hereafter be, that the value of gold contained in the same will be paid in gold coin, and the value of silver in silver coin. The value of the silver will be calculated at \$1.21 per standard oz., and is exempted from the coinage charge, unless deposited for silver dollars, in which case a charge of  $\frac{1}{2}$  per cent. will be made additional. Bullion of the above denomination will be entered on the gold and silver register, as most congruous with the physical aspects of the material, but in the warrant it must be marked that so much is to be paid in gold and so much in silver, according to the contents reported by the assayer. The above rules, and charges were promulgated on July 10th, by Superintendent Robert J. Stevens.

U. S. BRANCH MINT, Nov. 6th, 1861.

On and after the 15th inst., a charge varying in accordance and the character of the deposit, from half a cent to three cents per oz., gross, in addition to the general rates, and be imposed on all bullion deposited for coinage or manufacture, which will require toughening or extra refining to render it suitable for mint purposes.

ROBT. J. STEVENS, Superintendent.

## Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent Right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

PACIFIC PATENT AGENCY....J. SILVEESMITH,  
 SOLICITOR.

## MINING AND SCIENTIFIC PRESS.

## THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

To Chemists, Architects, Millwrights and Farmers! This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers:—Four Dollars per annum.

## Club Rates.

Five Copies for Six Months, \$8.  
 Ten Copies for Six Months, \$16.  
 Ten Copies for Twelve Months, \$30.  
 Fifteen Copies for Twelve Months, \$44.  
 Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 50. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

## W. B. EVER, Publisher,

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## OPPOSITION

## People's Line to New York.

ROUTE CHANGED FROM NICARAGUA TO  
 ISTHMUS OF PANAMA.

Through in Twenty-one Days!!!  
 FIVE DAYS AHEAD OF THE MAIL.

The fast and favorite *Double Engine Steamship*  
**HERMANN, 3,000 TONS,**  
 E. HOWES.....Commander.

Will be dispatched for

**PANAMA,**

From Mission street Wharf.

Punctually at 4 o'clock P. M., of

**SATURDAY, DECEMBER 20, 1862**

Connecting at Aspinwall by the Panama Railroad,

And thence by the Splendid Steamship

**AMERICA,**

2,000 Tons.....JEFF. MAURY, Commander.

The America has proved herself the swiftest Steamship afloat, and in comfort, cleanliness and regulation is incomparably superior to any other running to Aspinwall.

The Moses Taylor is known to be the fleetest ship on the Pacific, and passengers may confidently anticipate making the through trip in 22 days, as obstructions which are said to have been thrown in the way of passengers, by the Nicaragua Government, cannot possibly occur on this route.

## THE PEOPLE'S LINE

Has been established to meet the universal demand for an

## OPPOSITION,

And every Californian should give it a preference for the public good, as well as his own private advantage, which will be secured by

**Reduced Fare, Good Accommodations, and Quick Trips.**

This line is intended to be a permanent one, and is not put on for the purpose of being bought or driven off. Speed, safety and the utmost comfort of passengers are the main objects. To secure these no merchandise freight (other than specie) will be taken. The MOSES TAYLOR is built with Water-Tight Compartments, and is unequalled for safety as well as speed.

For information or passage apply to

I. K. ROBERTS, Agents,  
 425 and 427 Battery street.

Dec. 1st—St. LOUIS, Captain E. S. Farnsworth,  
 11—GOLDEN AGE, W. H. Hudson, Commander.

D. R. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner. apl6

W. RIL & CO., Importers of Havana Cigars, Tobacco, Special Depot of Meersbaum and German Pipes, 226 Front Street. m1

H. HOFER, Coffee and Dining Saloon, and Bakery No. 163 Clay street bet. Montgomery and Kearny. m1

C. W. THOMAS, Plaining Mill, California street, facing the Mission R. R. Depot, San Francisco. m16

## MUSIC! MUSIC!! MUSIC!!!

A. KOKLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise.

Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c., &c.

Light's New Patent Insulated Iron Frame is put into all of

Lighte & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

oc7

A. KOKLER, Agent.

CORNS AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skillful and scientific Professors of Philadelphia, and having made this branch of surgical science my speciality for nine years, enables me to operate skillfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can recommend you with confidence to the citizens of San Francisco, as one of the most skillful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertions in the new and growing city of the Pacific.

We subscribe ourselves yours,  
 Rev W. Stanton, L.L.D.,  
 Richard A. Vaux,  
 Dr. Straud, M.D.,  
 Dr. Loomis, M.D.,  
 Cleopole Stevens, M.D.,  
 Samuel Poncest, M.D.,  
 Walter C. Foster, M.D.,  
 S. W. Howard, Att'y at Law,  
 Pierce Butler,  
 Henry B. Linton, M.D.,  
 Wm. L. Howard, M.D.,  
 Philippe Lity, M.D.,  
 Myers Davis, M.D.,  
 W. M. Thompson, M.D. and others.

No. 718 Catherine street—this is to certify that Dr. Kennedy has removed corns and bunions off my feet, which have annoyed me for years. He also removed a cancer from my middle finger, which I had no use of for a period of six months. I cordially commend him to the suffering humanity of Philadelphia as a skillful surgeon. MRS. J. W. HAMMOND.

## REFERENCES:

John Corbett, M.D.,  
 Capt. McClure,  
 Wm. H. Mills, Jr.,  
 Rev. Walter W. Stanton, L.L.D.,  
 Samuel W. Howard, Att'y at Law,  
 Cleopole Stevens, Pharmacist,  
 Mrs. Smith, Greene street,  
 Mrs. W. L. Howard,  
 Walter O. Foster, Com Mer, Third st,  
 Myers Davis, Market st, above Fifth,  
 Major Comstock,  
 Mrs. W. Patridge, Walnut street.

From Dr. W. L. Stevens: Dr. Kennedy has operated upon my feet, and has effectually cured me of some torturing pests that I have been annoyed with for years.

From the Rev. Walter M. Thompson: This is to certify that while sojourning in Philadelphia, Dr. Kennedy has operated on three of my family to my entire satisfaction.

From the Hon. Wm. M. Thorne, ex-member of the Ohio Legislature: This is to certify that I called on Dr. Kennedy to operate on my feet: He displayed great skill as a surgeon, and I am satisfied that he has effectually cured me of those torturing pests which have annoyed me for many years.

From Geo. F. Omerly, 637 Arch street: This is to certify that I called on Dr. Kennedy. He has operated on my feet to my entire satisfaction. au21





A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

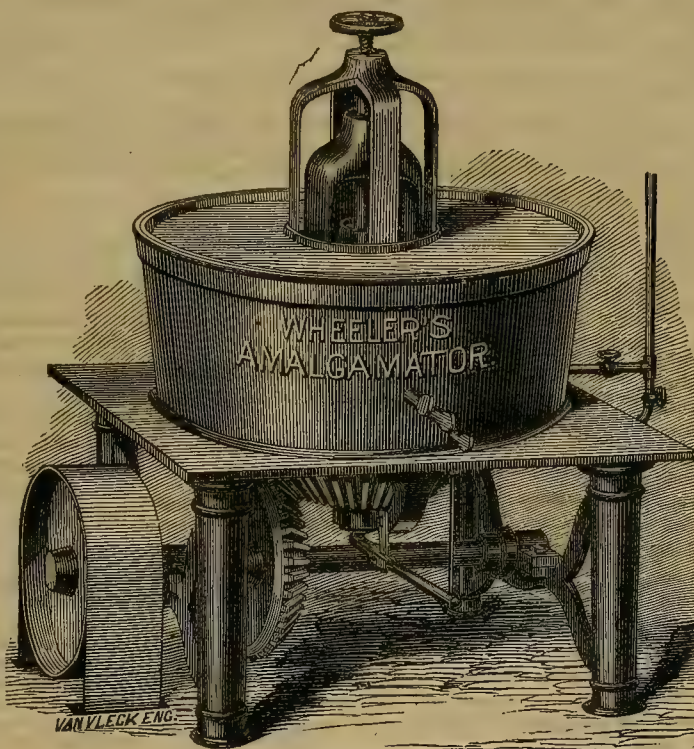
SAN FRANCISCO, MONDAY, DECEMBER 29, 1862.

NO. 9.

THE upper of the three accompanying engravings represents a perspective view of a new amalgamator recently patented by Mr. Zenas Wheeler, of this city, as it appears when at work.

The engraving upon the left represents the amalgamator opened. In the bottom of the pan M are seen the dies L L L L L. The inclined spiral ledges K K on the side of the pan are designed to create an upward current of the pulp by which it is forced again to the centre of the top of the muller, and thence through a proper opening, underneath the same, for re-grinding. This current is kept up, so long as the machinery is in motion, and by thus constantly changing the particles, every portion of the ore is soon reduced to an impalpable powder, and in much less time than by the ordinary mullers, where no such current is established. The letters G G G G represent the muller raised from its place in the bottom of the pan with the face turned toward the observer, exhibiting a set of shoes, which, like those in the bottom of the pan, are also moveable, and may be readily replaced when worn out. The letters I I represent supports for the stationary wings D D D as represented in the engraving upon the right. The office of these wings is to aid in forcing the current of ore to the center of the pan as described above.

A, in the engraving upon the right represents the support of the inner end of the wings which are adjustable by the screw H upon the top of the shaft C. B is the driver which carries the muller E. G G represent



an end view of the shoes on the face of the muller. F F are inclined spiral threads on the outer edge of the muller, which in connection with the spiral ledges on the pan create the upward current as before described.

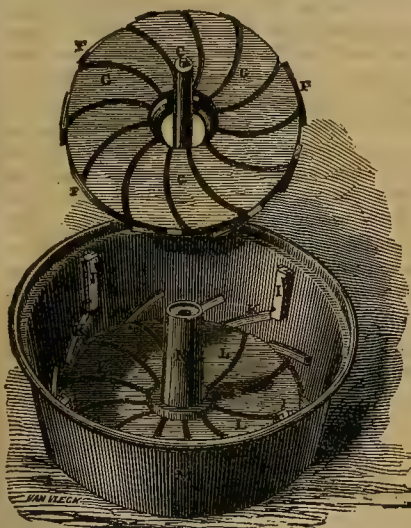
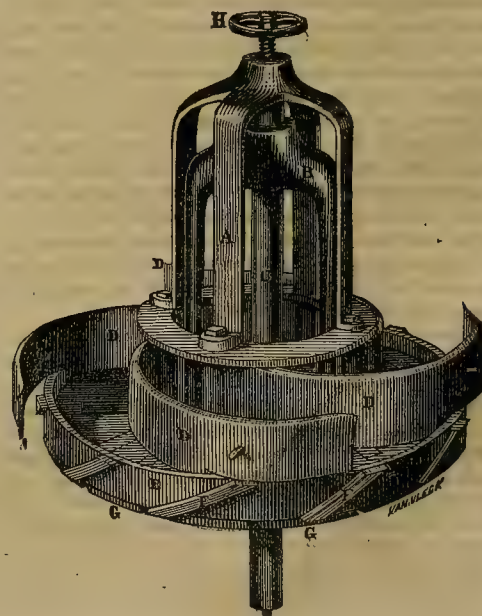
The steam pipes represented upon the left of the upper figure are designed—the lower one to carry steam to the steam chamber, beneath the bottom of the pan for heating the pulp, and the upper one to convey the steam directly to the pulp in the pan.

WE would call the especial attention of readers to the article on our second page under the head of "Electricity in Medical Practice." After reading that they will lose nothing by perusing the advertisement of Dr. J. W. Vau Zandt, on the seventh page. We would also take occasion to say that the article alluded to has not been prepared at the suggestion of the Doctor, but solely with reference to the importance of the subject in a scientific and hygienic point of view. Should any of our readers, either medical or otherwise, entertain views opposed to those therein set forth, we should be pleased to hear from them, and will most cheerfully accord them room in our columns.

THERE are at present in San Francisco five institutions in which Catholic youth are educated in the best and most complete manner, free of cost to their parents.

**WELDING IRON IN VACUO.**—In a communication to the Academy of Sciences, at Paris M. Faye, according to *Galignani*, has given the following account of some experiments, in which M. Rahmkorff took part. An iron wire was cut in two, and the ends brought into contact without any mechanical pressure: this done, by means of an electrical current the wires were heated to a dark red *in vacuo*, and they were thus instantaneously welded together. The wires were at an angle of 150 degrees; and yet, with that inclination, they supported a weight of upward of three kilograms, before breaking at the point where the welding had been effected. The same experiment, made in the open air, by way of a counter-proof, led to no result. Encouraged by this success, M. Faye heated a thick iron cylinder *in vacuo*: it had been sawed in two, and the parts then joined together by two screws. The latter having inadvertently been made of brass, they began to melt during the heating process; but although but a very small portion of the metal had actually become fluid, it penetrated by capillary attraction, aided by the vacuum, into the smallest fissures, soldering the two pieces with extraordinary nicety.

**SILVER IN TUOLUMNE.**—Reist & Co., proprietors of an extensive quartz mill and a rich vein near Rawhide Ranch, in Tuolumne county, are putting up an improved apparatus for extracting the silver from the ore found in their rock. They have lately ascertained that their rock is nearly as rich in silver as in gold.





## Electricity in Medical Practice.

Among the many new and wonderful applications of Electricity, that of its recent use in the practice of medicine, is not the least important to the world. That this principle can be successfully applied to diseased states of the system, in a large portion of the diseases to which human nature is more or less frequently subjected, is beginning to be quite apparent to medical practitioners. That it is destined at an early day to be received as the great-looked-for necessity, to aid medicine in overcoming organic and functional derangement, and render its effect uniform and reliable, is becoming more and more apparent in the minds of all practicing physicians, who are willing to allow that every attainable truth with regard to medical practice has not already been discovered, and years ago reduced to practice and recorded in books of medical science.

"It is now established, beyond a doubt, in the minds of all liberal practitioners, that the muscular contractions, which give action to a living limb or organ, correspond to currents of electricity existing there in appreciable quantities. That electricity is the living essence, that it is the vitality of all vitalities, that it is the great imponderable, subtle, circulating principle of life can be no longer questioned. In animal life the brain being the great battery, the nerve-cords, its conductors, pass from it and the spinal cord to every organ, tissue, vein and artery, running along with the great circulation of blood, imparting by its way its vitality, which enables the assimilation of all the principles going to sustain life, each to its proper tissue of the body.

If this is essential to life, how can diseased states of the system respond to medical agencies, when the great conducting, essential, and life-maintaining principle—Electricity—is not present or is broken in its current, or is wanting in its proper and healthy equilibrium? Surely the part must die without this great life-giving agency is first restored; and when once alive, when the healthy current is restored, vitality is restored and the response of nature inevitable to the agencies used for the relief of disease.

How often do we see the excited mind cure the suffering body. The sway of will thoroughly stirred into action often transcends the curative power of medicine; and what is this excited mind and sway of will, but the electro-magnetic forces of the battery of the brain, arousing and bringing into life the restoration of that absolute and requisite nervous fluid, upon which alone the energies of all parts of the system have being.

Who has not seen—what physician has not witnessed the death of men and women, when in their own minds they felt they could give no reason for such decease: that an examination after death would show no cause? Take for example the late decease of a certain bold and great original surgeon of this city. What did the faculty say? Why some were of opinion it was softening of the brain; and what is softening of the brain but the destruction of the nerve matter? All witnessed his life pass away, his usefulness abridged—all saw his sight stricken from him in a moment, and again restored after a time—that he was attended by the most eminent and skillful physicians of our city, and he died worn out—the great battery of nature was deranged in its action, the nerve cords of his body which course side by side with the arteries and veins to every organ and tissue, whose proper function and office it is to vitalize and give life to the properties of the blood, had ceased their office; for the reason that the great FOUNTAIN OF ELECTRICITY, the battery of the brain, was destroyed, its equilibrium was lost, its action perverted—and however correct the diagnosis of his attendants, his body could give no answer in response to medicines, for the great fountain of life ceased to enforce that energy necessary to the carrying on of health."

Thousands of lives go quietly out, every year, from nameless causes, which baffle every effort of the skillful physician—his medicines refusing to produce their usual effects, from causes entirely beyond the reach of his knowledge. In most cases of this character the experience of those who have adopted the modern theory of the electro-magnetic and galvanic action constantly going on in the healthy system, tells them that the great disturbing cause is the diseased condition of the brain-battery and its attendant nerve-cords or conductors which can be reached and re-vivified only by an artificial application of this great life-giving agent. The theory of Electro-galvanic treatment of disease, as an adjuvant

or aid to medicine is rapidly gaining ground. The everyday experience of those who employ this agent in a liberal and judicious manner, is convincing in its effect, and conclusive of the important fact that it matters not from what cause disease originates, or how obstinate the case, nor of how long standing; recovery by this mode of treatment, is more certain and more speedy than by any other—for the electric current will arouse the system from the depression caused by disease, which may have baffled the skill of eminent Surgeons; to place it within the reach of ordinary medicines.

## COPPER.

An occasional correspondent of the *Alta*, of this city, recently gave a detailed account of the copper mines of Calaveras county, from which we condense as follows:

There are two principal copper districts in this county, divided by a low course of hills, but both in the same range. The one is known as Copperopolis, located about thirty five miles from Stockton; the other is known as the Gopher district near Telegraph City, about twenty-nine miles from Stockton. The two localities are in some degree rivals.

## COPPEROPOLIS DISTRICT.

The "Union," and "Keystone" are the two principal mines in this district. Then comes the "Empire," the "Calaveras," the "Webster," the "Kentucky," etc.

THE UNION MINE is taking out ore at the rate of twenty to twenty-five tons per day, fifteen of which they are sending to this city for shipment. The Company is formed of thirteen shares of 150 feet each, principally owned by Lolor, Meader & Co., and their Boston correspondents. The ore averages 20 per cent., and a dividend of eleven thousand dollars per share will be declared next [this] month. This mine employs 110 men and has very extensive improvements.

THE KEYSTONE MINE is shipping about one hundred tons per month. It is incorporated, with Mandeville, the late Surveyor General, as President. The shares of one hundred and fifty feet are held at a high figure.

OTHER COPPEROPOLIS MINES.—The Empire is believed to be a continuation of the Union lode. It is being thoroughly prospected, but is not yet upon the copper. The Webster, Kentucky, Calaveras, etc., are all in the same position, and offering every inducement for continued workings.

These mines about constitute the strength of the Copperopolis district. The Union is, of course, the back-bone, and gives employment to a great number of miners, timber cutters, teamsters, etc. It is being admirably developed under the superintendence of Captain Hardy, and bids fair to be worth millions of dollars at an early day.

## THE GOPHER DISTRICT.

The mines of this district are six miles nearer Stockton than the Copperopolis belt. A long mountain road is avoided, and a saving of two dollars per ton effected in hauling the ore.

The Napoleon Mine is located in the Gopher district one and a half miles South of Telegraph City. It is the principal mine in the district, and the only one regularly shipping ore. It holds 2700 feet upon the ledge, is incorporated and is being developed with an energy and ability seldom equalled in mining operations. A village has sprung up around it; and the Company's houses, machine shops and steam works have gone up like magic.

It is stated that A. J. Moulder, the present Superintendent of Public Instruction, is to be the Superintendent after the first of January. Mr. Moulder is a thorough engineer, and the mine cannot fail to succeed under his management. The Company is now taking out about 200 tons of ore per month, from a depth of forty-five feet. This ore is assorted and something over half of the whole amount is shipped. Cornish workmen are chiefly employed. The stock of this mine is all held in this city.

THE CAMP AND McNULTY MINE is located about three quarters of a mile from the Napoleon. Very promising ore has been struck. Fifteen tons have been shipped as a test sample. Eight men are at work upon the mine.

THE STAR CLAIM, between the McNulty and Napoleon, is as yet undeveloped.

THE LIVE OAK MINE was originally located by Mr. Borchert. A shaft has been sunk upon it to the depth of about

eighty feet. It is chiefly owned in this city. The work upon the mine is being prosecuted with much energy by Mr. Botcher, as Superintendent. Its value is a mere question of time.

THE HUGHES MINE, at Quail Hill, is chiefly owned by Hiram Hughes, and is mined for gold as well as copper. Mr. H. is developing this valuable claim according to his own views. It displays a mass of rich carbonates of copper, and yielded largely in gold during last year. At present the workings are limited, but at a future period the value of this large deposit of mineral wealth will be fully appreciated.

## RECENT DISCOVERIES.

New discoveries of Copper are constantly being made in this (Calaveras) county. The *Calaveras Chronicle* of Dec. 6th says a copper mine has recently been discovered at Hog Hill, in Salt Spring Valley, which is rapidly being developed and promises to become one of the richest in the county. New leads are being found in the vicinity of Campo Seco, and the old ones are proving rich. The town is rapidly increasing in importance.

## COPPER IN SONORA COUNTY.

The *Sonora Flag*, of recent date, says that J. Oliphant & Co. who have been engaged in prospecting for copper in the neighborhood of Montezuma, for several months past, have at last "struck it," at a place about a mile to the north of the town. The lead consists of two separate veins running parallel and close to each other, about eighteen inches thick, each.

The *Democrat*, published in the same county, of late date says deep tunnels are being run into the Melones copper lode, and it is expected that the vein will soon be struck.

## COPPER IN PLACER COUNTY.

The *Auburn Herald* of the 13th inst. says:—"We were shown yesterday a specimen of copper ore recently discovered about seven miles from Auburn. Those who profess to know inform us that it is much richer than any that has yet been discovered in Copperopolis. It was an old Copperopolis miner who discovered the lead. He has already formed a company for the working of the mine."

## COPPER SHIPMENTS.

The Napoleon Copper Mining Co. shipped, last week, sixty tons of ore to New York, by the ship Logan. This is said to have been the first shipment to that city. Boston having previously monopolized all the shipments to the Atlantic states.

MINERALS IN MAINE.—Very important mineral discoveries have recently been made in Maine, Canada and New Brunswick:

There is considerable excitement in the region of Lubec on account of the discovery of valuable metals and ores, especially of lead and gold. Prof. Shepard, of Connecticut, is now prospecting for mines and minerals in eastern Maine, and the adjacent provinces. His opinion is that Washington county is exceedingly rich in minerals. He says they have just struck a lead mine more valuable than any other one known in the world, far exceeding the Missourian mines which he has examined. He backs up his opinion by investments and shows his faith by his works, for he has purchased five thousand acres of land in the town of Cutler, which embraces five miles of seacoast.

TAX ON COAL LANDS.—The Commissioners of Internal Revenue have decided—1st. The owner or lessee of coal lands must have a dealer's license in order to be authorized to sell the product. Producers of coal are not required to take a manufacturers license. 2d. Owners or lessees of coal lands who take out the coal solely for their own use, as manufacturers, must pay the tax, as the coal is used for consumption. 3d. Coal dealers whose sales are less than \$600, are liable to the duty; for not being manufacturers, the provisions of section seventy-three are applicable. 4th. Wagons who purchase coal by the load, from the dealers, to sell to customers, are to be rated as peddlers. 5th. Steamboats are not manufacturers. The same is true of coal barges.

POSTAGE ON BOOKS.—It is not generally known that an act was passed at the last session of Congress reducing the postage on books sent by mail, to the rate charged for newspapers—one cent an ounce in the State, and three cents when sent East. Heretofore the postage on books was the same as letter postage. Parties, therefore, can send books to their friends in the East, at a trifling expense.



# MINING AND SCIENTIFIC PRESS.

## SAN FRANCISCO MINING NOTICES.

The Succor G. & S. M. Co. will hold its annual Meeting, January 6th, 1863, at its Office, Nos. 1 & 2, Montgomery Block.

Wide West Mining Co.—The Secretary of this Company publishes an important notice to Stockholders, in the daily papers.

Reese River Mining Co.—Ten cents per share has been levied upon the capital Stock of this Company, payable Jan. 14th.

Hawley Mining Co.—Annual Meeting for election of Trustees will be held at Office 204, Front St., Jan. 5th.

San Francisco S. M. Co. have laid an assessment of \$25 per share, payable on or before Jan. 1st, 1863.

Gazelle G. & S. M. Co. will hold annual Meeting Jan. 7th.

Pacific Quicksilver Mining Co.—Assessment No. 3, of \$1 per share was levied, Dec. 22, payable immediately.

Keystone Copper Mining Co., advertise for proposals to purchase or treat 3d quality copper ore. Proposals received till Jan. 15th.

Mammoth Ledge Mining Co. give notice of an assessment levied and payable on or before Jan. 13th. Also that the first annual Meeting for the election of Trustees will be held at office, Jan. 17th.

MINERS' MEETING.—At a meeting of the shareholders of the Siegel Mining Company, it was resolved that a meeting be called of all the miners of the Siegel Mining District, for the purpose of making laws by which said District may be governed, and that said meeting shall take place on the 15th day of January, 1862, in said Siegel District, in or near a certain place better designated as the Siegel Mining Company's Cabin.

Hale & Norcross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 25th.

CHARLES CANY MINING Co.—An assessment of \$1 50 per share was levied on the stock of this Company, Dec. 14th, 1862, payable on or before January 14th, 1863, at office, 338 Montgomery St.

LIVE OAK COPPER MINING Co.—Office, Montgomery Block—An assessment of thirty cents per share was levied, Dec. 1st, 1862, payable in thirty days.

NORTH POROSI SILVER MINING Co.—Annual meeting of Stockholders will be held on the first Monday in January, 1863.

An assessment of four dollars per share was levied on this Company, Dec. 11th, 1862, payable on or before January 16th, 1863, at office, Cor. Battery & Washington Sts.

MEREDITH GOLD & SILVER MINING Co.—An assessment of two and a half dollars per share (five dollars per foot) was levied by this Company, Dec. 11th, payable immediately, at office, 712 Montgomery St.

RED, WHITE AND BLUE G. & S. M. Co. levied an assessment of 25 cents per share, on the 10th of Dec. payable within thirty days, office cor. Pine and Montgomery Sts.

BULLION G. & S. M. Co.—The Stockholders are notified that they will hear something to their advantage by calling at the office of the Company, cor. Pine and Montgomery Sts.

CEDAR HILL TUNNEL MINING Co.—Annual Meeting of Stockholders will be held at office, No. 5, over Parrot & Co's Bank, on the 1st Thursday in January.

SIERRA S. M. Co. will sell at auction, shares on which arrears may be due on Monday, January 5th, by Duncan & Co.

NORTON G. & S. M. Co.—An assessment of two dollars per share was levied Nov. 25, payable on or before Dec. 30th, 1862, at office 522 Montgomery St.

ADRIATIC G. & S. M. Co. will hold its annual Meeting of Stockholders on Monday January 5th 1863, at No. 4, Amory Hall.

WILLOW SPRINGS G. & S. M. Co.—The annual meeting of Stockholders will be held at 224 Montgomery, on the 29th of December, for election of officers.

BANNER G. & S. M. Co. has been duly organized. All claims or interests not presented for examination at office, 522 Montgomery St., on or before Dec. 31st, 1862, will be forever barred.

The first annual meeting of the Stockholders of this Company will be held at their office, Dec. 24th, for the election of Trustees, etc.

DIOS PADRE G. & S. M. Co.—An assessment of three dollars per share was levied, Nov. 29th, payable on or before Jan. 1st, 1863, at office 502 Montgomery St.

EMMETT G. & S. M. Co.—An assessment of twenty-five cents per share was levied, Nov. 21st and is now due, and payable at office 326 Clay St.

VIBBARD G. & S. M. Co.—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office 326 Clay St.

DOYLE G. & S. M. Co.—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office No. 326 Clay St.

LIVINGSTON G. & S. M. Co.—An assessment of 25 cents

er share was levied, Nov. 21st, and is now due and payable at office No. 326 Clay St.

ISAAC'S G. & S. M. Co.—An assessment of 25 cents per share was levied, Nov. 21st, and is now due and payable at office No. 326 Clay St.

KOHLER G. & S. M. Co.—An assessment of 25 cents per share was levied, Nov. 21st, and is now payable at office 326 Clay St.

EL DORADO G. & S. M. Co.—An assessment of one dollar per share was levied, Dec. 1st, and payable at office, on N. E. cor. of California and Montgomery Sts., at or Superintendent in Virginia City.

IOWA MINING Co.—An assessment of Four Dollars per share was levied, Dec. 4th, payable at office 522 Montgomery St. on, or before Jan. 3d, 1863.

JOSEPHINE MINING Co.—An assessment of two dollars per share was levied, Nov. 19th, and is now due and payable at office No. 21 Stephenson House.

BURNSIDE S. M. Co.—An assessment of one dollar per share was levied, Nov. 17th, payable within 30 days, at office 712 Montgomery St.

CALEDONIA G. & S. M. Co.—An assessment of 20 cents per share has been levied by order of Trustees, and all Stockholders neglecting to pay on or before Dec. 22d, will have Stock sold to pay the same on that day, in front of the Post Office, Gold Hill. Office 412 Front St.

HAWLEY MINING Co.—An assessment of 50 cents per share was levied, Nov. 15th, payable at once, at office 204 Front St.

AMERICAN QUICKSILVER MINING Co.—An assessment of one dollar per share was levied, Dec. 16th, payable at Company's Office, in Petaluma, within 30 days.—At the expiration of which time delinquent Stock will be sold.

NAPOLÉON COPPER MINING Co.—The first annual meeting of this Company will be held at office N. E. corner of Sacramento and Montgomery Sts., on Monday, January 12th 1863, at 8 P. M.

MADISON G. & S. M. Co.—The books of this Company are open for issuance and transfer of Stock, at 608 Merchant St.

An assessment of two dollars per share was levied on the Stock of this Company, Nov. 13th, payable at once.

BURNING MOSCOW S. M. Co.—An assessment of Two Dollars per share was levied, Nov. 25, for the purpose of defraying expenses of steam pump and machinery now being erected to drain the mine. Prompt payment is requested at the Company's office, corner of Montgomery and Jackson Sts., to Jos. P. Nourse, Sec.

The regular quarterly meeting of this Company will be held at the Company's office, on Wednesday, Dec. 24th 1862.

## WASHOE MINING NOTICES.

POORMAN G. & S. M. Co.—An assessment of Five Dollars per share was levied, Nov. 9th, and another of Ten Dollars per share, Nov. 21, payable at once to the Secretary, R. J. Michel.

COLEDONIA TUNNEL AND MINING Co.—An assessment of Thirty-two Dollars per share was levied, Dec. 8th, payable immediately to the Secretary, Martin White.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Beach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

LA CROSSE MINING Co.—An assessment of \$1 25 per share was levied, Dec. 8th, payable at office 73 C Street, Virginia City.

HAWK EYE SILVER MINING Co.—An assessment of 25 cents per foot was levied, Dec. 6th, payable immediately to S. A. Kellogg, Sec. Gold Hill.

ASHLAND G. & S. M. Co.—An assessment of fifty cents per share was levied, Dec. 10, payable at the office of M. J. Power, Sec., B. St.

INDEPENDENT G. & S. M. Co.—The annual meeting of this Company, for electing officers, will be held at Galena, on the first Monday in January.

THE SIERRA NEVADA SILVER MINING Co. advertise in the Territorial Enterprise, 1042 shares of stock for sale for assessments, on Monday, Dec. 29th. Shareholders will do well to look to their interests.

UNION COMPANY, GOLD HILL.—An assessment of fifty cents per foot has been levied, payable at the rate of ten cents per foot, Nov. 15, 22, 29; Dec 6, and 13, at the Company's office, Gold Hill.

NORMAN SILVER MINING Co.—An assessment of One Dollar per share was levied, Nov. 19th, payable on or before Dec. 31st, to the Superintendent in Virginia City, or at the office, No. 40, Montgomery Street, San Francisco.

MARTIN WHITE MINING COMPANY.—An assessment of ten cents per foot has been levied, payable to the Secretary, at office on C Street, Virginia City.

THE SWEENEY Co., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

MOHEGAN Co., Cedar Hill.—An assessment of fifty cents

per foot was levied, Dec. 5th; payable forthwith, to the Secretary at Virginia City.

ORIENTAL G. & S. M. Co.—The 3d assessment of 15 cents per foot, was levied, Dec. 8th, and is payable at office, No. 31, C Street, Virginia City.

## ESMERALDA MINING NOTICES.

THE ZENOBIA LODE COMPANY, give notice that they claim a superior title to the Johnson Co., claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder,

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

To Chemists, Architects, Millwrights and Farmers! This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$58.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

### EWER & SMITH, Publishers,

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise.

Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c., &c.

Light's New Patent Insulated Iron Frame is put into all of

Light & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they RANK AS THE FIRST AND BEST In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

A. KOHLER, Agent.

UNDER THE PROVISIONS of what is known as the Shafter Bill, it is proposed to sell the city title to homestead lots for twenty-five to two hundred dollars each.

The undersigned will sell homestead lots within the limits of the city, and miles nearer to the business centre than many of the lands covered by the Shafter Bill, and place the party in immediate possession of the same, without present trouble or prospective lawsuits, for from \$10 to \$20 each. THE TITLE is absolutely PERFECT, being a Spanish Grant, finally confirmed and patented by the United States. The Shafter Bill respects this title: the city authorities respect it; the District Court and the Supreme Court of the State, as well as the District Court and Supreme Court of the United States respect it; besides the TITLE HAS BEEN FOREVER QUIETED BY A FINAL DECREE AND JUDGEMENT AGAINST THE CITY so that there is not even a cloud or shadow upon it. Whoever purchases one of these lots will buy a lot, not a lawsuit.

Office No. 19 Naglee's Building corner of Montgomery and Merchant sts. HARVEY S. BROWN.



# Mining and Scientific Press.

W. B. EWER, ..... EDITOR.

MONDAY ..... DECEMBER 29, 1862.

The MINING AND SCIENTIFIC PRESS is published at the Federal Building, Room 24, corner of Battery and Washington streets San Francisco, Cal., at Fifty CENTS per month, or \$4 per annum, in advance. Advertisements, Fifty Cents per line. A liberal discount made to quarterly advertisers.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEROTYPING and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## THE AGE OF MACHINERY.

We read of the "Heroic Age," of the "Golden Age," of the "Iron Age," of the "Dark Ages" and of the "Progressive Age." The latter term has been, not altogether without reason, applied to the present age; but were we to select an epithet by which to characterise this age of ours, we should term it the "AGE OF MACHINERY"—for such it is, in the fullest sense of the term. The entire individual study of the present day is the adaptation of means to ends. Nothing is done directly, or by hand, which, by any human contrivance can be accomplished by machinery. From the simplest operations in human industry, even to the most complex, some cunning, abbreviating process has been devised by the mechanical ingenuity of the present age. The Patent Office at Washington, within a few years, has become a perfect wilderness of labor saving contrivances, and displays to the astonished looker on, an aggregate of inventive genius, which is absolutely bewildering.

Go where we will throughout the land; notice whatever branch of industry we may, old modes of exertion are everywhere thrown aside, and the slow and feeble hand of the living antizan has given way before the speedier and tireless limbs of wood and iron which the cunning inventor has taught to work at his bidding. The shuttle has dropped from the hands of the drowsy weaver and fallen into the iron fingers that never tire, though they ply it many scores of times faster than it was wont to be moved. The farmer lays down the shovel and the hoe, the rake and the scythe, and steps aside for the multitudes of substitutes now plied by the power of steam or horses. The sailor furls his sail and drops his oar, while he bids his strong unwearied servant with iron limbs and vaporizing breath to bear him along the quiet river's bosom, or over the wildest ocean's swell. Even the horse is stripped of his harness and becomes laggard in his swiftest flight, as the swifter fire-horse, yoked in his stead, goes thundering along his iron way! The very lightnings of heaven—God's grandest and most subtle agents—have been subdued, and brought to the aid of man, and taught by him to convey his thoughts from point to point, with a speed which not only equals but absolutely outstrips time in his most rapid flight! We have machines which, almost without the aid of human hands bore their way into huge mountains in search of hidden treasure or to make straight the otherwise devious ways of commerce; again, they go down into the depths of the sea and dredge out its bottom, or attack the hitherto everlasting hills with a faith and force which causes them to remove at once to the sea and make thereof a smooth highway. We war with rude nature, and by our resistless energies come off always victorious.

Time was when commerce, with its white winged sails, ruled the world, and commercial position, alone gave power to nations. It was thus that Tyre, Carthage, Rome, Venice, and lastly England ruled the world by their commercial positions alone. Now all is changed. THE AGE OF MACHINERY IS TRIUMPHANT, and the genius of invention has sought this western hemisphere for its imperial seat. The

wooden walls which have hitherto been quite sufficient to protect the walks of commerce, and bid defiance to a world in arms, are now as weak and feeble in comparison to modern engines as the flapping sails which overshadow those walls in a calm, are to the almost resistless force of the gigantic machines which drive the huge steamers of the present day in their way across the deep, regardless alike of storm or calm. Wooden walls within the last year, have gone down forever before the iron clad ships, which the active genius of the American mechanic has brought to perfection as sudden and unexpectedly as the form of Hercules rose from the prolific brain of Jove. Thus it is that machinery now rules the world, whether in the arts of peace or war. The fate of nations will hereafter depend solely upon their attainments in practical science—in peace they must be able to contrive the most perfect machinery and apply it to the greatest variety of industrial pursuits—in war they must possess the means and knowledge to construct the most formidable engines of attack and resistance, and the heaviest calibre and longest range of guns.

## WHEELER'S AMALGAMATOR.

Upon the first page of to-day's issue will be found several finely executed engravings illustrative of the new Gold and Silver Amalgamator recently invented by Mr. Wheeler, of this city. Mr. W., besides being a first class mechanic, has probably had more experience in the construction and running of quartz mills than any other person in California. He has here brought his practical knowledge to bear, most successfully, in devising and constructing an apparatus for triturating gold and silver ores and amalgamating their metals. By an ingenious combination of certain well known principles, and the addition of several others that are new, and upon which he bases his patent, he has been able to introduce to the mining public a machine which needs only to be seen, by any practical miner, to be at once accepted as the *ne plus ultra* of amalgamators.

The machine is already in successful operation in Washoe, at the Zephyr Flat Mill, upon Carson River, where it has been running for some months, side by side, with the most approved of other amalgamators in use, also with the most uniform superiority in point of saving efficiency, and of care and attention required in running. One principle which is involved in this invention, and which is entirely new, is that the triturating and partial amalgamation is effected in one machine, while the complete amalgamation and cleaning up is confined to another, of entirely different construction. The first machine, only, is represented in the engraving which we give to-day, and may properly be called a "Triturator." The other machine, is called a "Separator," and will be illustrated as soon as the engraver can furnish us with the engravings. Two or three of the "Triturator," are designed to go with one "Separator."

It is almost impossible, even with the accompanying engravings, to convey a very clear idea of the essential principles of the "Triturator." In order to be fully appreciated it must be seen. The model itself is sufficient to carry conviction to every practical man, with regard to its utility and superiority. It is, however, in the combination of the two, and the new principles especially involved in the "Separator," where the most important advantages of the invention are most readily discovered. Of this we cannot speak more fully until we are enabled to place the engravings before our readers. Notwithstanding the complicated nature of the machine, nothing of the kind can be more simple in its construction or less liable to get out of order.

MONEY TO SPARE.—San Francisco has at this time a surplus of \$300,000 in her treasury, and the State half as much more. It has been suggested that the two amounts should be put together and invested in a monitor for the protection of this coast—trusting to Congress for its being refunded at some future time.

A HEAVY RAILROAD GRADE.—A railroad has been built in New Zealand fourteen miles in length, and rising in that distance 2,800 feet.

BULLION.—Almost nightly that huge wagon of Wells, Fargo & Co. backs up to the express office, and discharges heaps of pure silver bricks, the product of the Washoe mineral districts.—*Alta*.

## MINING NOTABILIA.

Our attention has been called to a bar of gold weighing 6 oz., 8 pwt., taken from 3000 lb. of arsenical pyrites, treated at Deetken's Metallurgical Works, near this city. We are assured that these pyrites, before being forwarded to Mr. Deetken were ground to an impalpable powder and submitted to the usual amalgamating processes, all the gold being extracted which could be made to amalgamate with quicksilver. Mr. Deetken claims that the process employed at his works for the treatment of sulphurets, is far superior to any wet process. He is undoubtedly correct, and all mill owners, who are working rock containing a large amount of sulphurets, will find it greatly to their advantage to save and forward them to Mr. D., who will work them for \$20 per ton. It is claimed that the yield by this process is from 30 to 50 per cent. higher than the usual processes of amalgamation. Mr. Deetken will set up at any mill, an apparatus for separating the sulphurets, for from \$50 to \$100—no power or clean water being required to operate the same. The works formerly owned by Mr. D., at Grass Valley, in Nevada Co., are well known in that region, where they have established a good reputation. It is his intention that his new establishment, in this city, shall, if possible, reach a still higher standard.

A VALUABLE DISCOVERY.—A rich and promising gold bearing lead of quartz was discovered last July, near Poverty Point, about two miles North of Placerville, by Messrs. John and Andrew Ellicott. The discoverers have organized a Company for working the vein under the title of the New York Quartz Mining Co. The New El Dorado Gold Mining Co. have taken up three sets of claims, known as No. 1, 2 and 3, adjoining the discovery claim on both the north and south. The Companies are actively engaged in opening their mines and erecting mills. The mills will soon be ready to run. Several shafts have been sunk upon different portions of the vein from 20 to 45 feet in depth, and El Dorado, No. 1 is running a tunnel. A large quantity of rock has already been raised, which is generally rich and well stocked with specimens. We examined a large quantity, last week, of very rich specimens which show much coarse gold. We trust the fortunate discoverers and their associates will find their "piles" in this new El Dorado.

BULLION.—The product of bullion from one hundred mills says the Virginia Union, is now considerably over a million of dollars per month, with the prospect of a rapid increase if things go on favorably. Several new mills are in process of building and will be finished inside of another month. Among these may be mentioned the Gould & Curry, and the large mill of the Daney Co. in addition equal to the production of half a million per month.

THE OPHIR COMPANY is running a tunnel through the length of their mine, 1400 feet, at a great depth from the surface. This work says the Virginia Union, when completed, will no doubt demonstrate the inexhaustible wealth of the Ophir mine, and increase confidence in the Comstock lode. Already different companies have tapped that lode from the centre of Cedar Hill to the summit overlooking Gold Hill—a distance of one mile and a half. Throughout this entire distance its unquestionable richness was established.

ANOTHER SILVER LEDGE.—The Quincy Union says, Mr. A. Robinson informs them that a ledge of silver rock has recently been discovered near Eagle Gulch, in Plumas county, that prospects very favorably.

THE Grass Valley National states that some persons have discovered a mine of the oxide of manganese, which is very useful in the process of silver saving. It is worth eight cents an ounce.

EARTHQUAKE.—Our citizens were pretty generally shaken out of their morning's nap, just before daylight on Tuesday last. Door bells were rung, plastering knocked down, etc., but no serious damage was done. The same shock was quite sensibly felt at San Jose.

HOLIDAY PRESENTS.—Messrs. Brauerman & Levy advertise an extensive Stock of rich Holiday Presents, at their sales room, No. 621, Washington Street, in this city. Particular attention is called to their well assorted Stock of Jewelry, Silver Ware and Precious Stones.



## NEW BUSINESS ARRANGEMENT.

Mr. C. W. M. Smith, having purchased one half interest in the "Mining and Scientific Press," will hereafter be associated with us in the publication of the same. The editorial management will continue as heretofore. Mr. Smith will take charge of the business of the office, and in that capacity, will call upon the mining and business portion of the city to obtain subscribers among such as are desirous of seeing a journal established in San Francisco, especially devoted to the great leading interest of the State, and to the general dissemination of practical knowledge among our people. After a short stay in the city Mr. S. will visit the principal mining localities in the State and neighboring Territory of Nevada, for the purpose of increasing the circulation and usefulness of the Press. During his travels he will keep the readers of the Press apprised of the general condition and progress of the mining interest in such localities as he may visit. We bespeak for him a kind and generous reception wherever he may go, either in the city or country.

Perhaps it may not be inappropriate, in this connection, to remind our citizens, whether directly engaged in mining or not, of the importance of establishing and sustaining at least one paper in the State of the character contemplated in the prospectus of the MINING AND SCIENTIFIC PRESS. At the suggestion of quite a number of gentlemen, anxious for the accomplishment of such a purpose, we have embarked in the enterprise, and can assure the friends of the same, that the value and interest of the paper will be in exact accordance with the liberality of their patronage. The imagination can scarcely comprehend the importance to which the legitimate mining interest of the Pacific coast may be carried in the course of another decade. The mines of the Eastern Slope are even now beginning to furnish an important portion of our monthly shipments of precious metals; while the mineral developments on this side, other than gold, are already beginning to attract attention of European, as well as Eastern capitalists. The growth, in wealth and population, of San Francisco, will be limited only by the developments of our mines. It is to be hoped then that her merchants, whether directly engaged in mining, or not, will yield a liberal support to a paper, whose sole mission is, by the diffusion of practical information, and interchange of opinions and experience among miners, themselves, to aid in the proper and early development of this great interest. It is furthermore important that a knowledge of the same should be placed before citizens, capitalists and working men abroad, to the end that our city and mines may be filled at an early day, with those hardy sons of toil who will be quite ready to avail themselves of the opportunities and privileges of our state, to escape from the turmoils and miseries of Eastern and European communities. This they will do whenever these advantages are properly brought to their knowledge. Again we bespeak for our associate, a cordial and appreciative welcome, while he goes among our citizens and merchants, with the above objects in view.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and *four dollars*, or *two dollars* for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so for meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short time.

## THE NEW CITY.

The unusually high water of last winter afforded a most excellent opportunity for the selection of building sites along our various valley streams. Among the numerous embryo cities and towns thus laid out, we know of no other which present more local advantages than the new city of Collinsville, on the Sacramento.

A glance at the Map of California is all that is necessary to satisfy any reflecting mind of the judicious selection of this site. It is never subject to overflow, as the wharf and warehouses were built at the highest flood last winter. The vast region of fine country around it is fast filling up, and if the uninterrupted navigation from San Francisco to Sacramento increases as it has done for the last five years, there is no reason why Collinsville should not become an important City, it being a midway stopping place for the steamers between San Francisco and Sacramento. Already, at and around Collinsville, there is a large number of inhabitants. They have a Post Office, Store, large Warehouse, and a fine Wharf, 200 feet long by 200 feet wide, which cost upward of \$10,000.

The farming country in Solano County cannot be surpassed. Fine soil, pure water, a milder climate, both in summer and winter, than almost any other part of California. A city with such a situation, surrounded by so desirable a country, cannot but have an early importance. A ferry has been established between this place, Antioch and N. York, making the distance only 35 miles, by land, to San Francisco.

The Company have donated one of the finest pieces of land in their city for a college and school house, to be finished by the first of May next.

Full information with regard to the place may be obtained by enquiring at the Office of the Collinsville Land Company, 318 California Street, either personally or by letter.

JOHN NUGENT AND ARCHIBALD C. PEACHY have gone East to attend to the celebrated New Almaden quicksilver mine case, now pending before the United States Supreme Court on an appeal.

## Mining Stock Report.

## REPORT OF SALES

At the San Francisco Mining Stock Board,  
For the week ending December 27, 1862.

Names of Companies.	Total No. Shrs.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Ophir	16,800	12	\$300	—	2000	—	—	—	—
Gould & Curry	4,800	4	500	—	—	—	—	2,600	2650
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	3,600	* 250	355	—	—	—	—	350	—
Potosi	4,400	1	400	80	65	—	—	—	—
Hale & Norcross	8 0	2	500	—	—	—	—	—	425
Sierra Nevada	1,800	4	300	50	60	—	—	75	78
Daney	2,800	2	500	—	145	—	—	—	—
Burling Moscow	4,800	2	100	58	50	—	—	57	56
North Potosi	3,600	1	300	—	5	—	—	—	—
Rogers, F. D.	2,000	1	250	18	17	—	—	—	12
Meredith	7,200	2	125	20½	20	—	—	22	24
Charles Caney	1,800	1	30	25	20	—	—	—	—
Sacramento	1,800	4	300	22½	—	—	—	—	—
Lucerne	10,000	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	—	—	—	070	—	—	—	675	—
Cedar Hill Tunnel	—	—	—	—	3	—	—	—	—
Mount Davidson	10,000	3	200	4	3½	—	—	4½	—
Wide West	8,500	4	60	390	380	—	—	—	—
Antelope	1,200	1	500	—	—	75	—	—	—
Esmeralda	1,600	1	1000	40	—	—	—	—	—
Real Del Monte	4,400	1	400	17	16	17½	—	—	16
Etna	1,200	1	100	—	—	11	—	3½	4
Utah	—	—	—	—	—	16	—	—	—
Silver Hill	—	—	—	14	13	13	—	—	—

The mining market for the past week has not been very active, owing chiefly to the occurrence of the Holidays. The sales at the Mining Board will be noticed above.

## REMARKS.

**OPHIR.**—This stock which, the week before, very materially declined and opened on Monday last at \$2,150, advanced early in the week to \$2,350 cash or \$2,400 on 60 days. Bates and Williams quotes sales, the past week, of 312 shares. The highest figures were obtained under the impression that a new and rich strike had been made in the mine, just north of the Mexican ground. The report not being confirmed, the stock was quiet during the latter part of the week.

The total amount of dividends made by this Company during the last seven months has reached \$470,000, or \$335 71 per foot. Under the close and economical management in prospect for the coming year, and the large amount of valuable ground now open for work, in addition to the increased capacity of the mill, it is but fair to infer that the dividends of this mine will be largely increased the coming year.

The GOULD & CURRY declared a dividend on the 23d instant, of \$24 to the

foot, payable on the 30th. This stock has been lightly dealt in, the past week, but little being in the market. Bates and Williams quotes sales of only 44 shares, from \$2,700 cash to \$2,900 on 60 days. Sanborn & Co. quote 20 shares at \$2,800 on 30 days, and 10 at \$5,700 cash. The following are the receipts and expenditures of this Company, from Dec. 16, 1861 to Dec. 1, 1862, as per Annual Report of the Secretary from which we collate:

## RECEIPTS.

Cash on hand, Dec. 16, 1861,	\$ 7,315 72
Balance of assessment No. 4	11,632 00
Total Receipts from all sources, from Dec. 16, 1861 to Dec. 1, 1862	891,895 98
	\$900,743 68

## EXPENDITURES.

For constructing Mill, purchase of woodland, improvements, cattle, working ores, etc., etc.	\$889,140 96
Cash on hand Dec. 16, 1862,	11,602 72
	\$900,743

A large quantity of ore from this mine, generally of inferior quality, has been worked the past year at several custom mills, with the following result, Amount received for ore worked and sold \$828,946 45 Working expenses on same 333,137 56

Net profits \$449,807 89

The balance of liabilities of the Company, over available assets, Dec. 1st, 1862, were \$40,110 51. From that date to Dec. 2d was sufficient to pay off that debt and declare a dividend of \$24 per foot—Henceforth we may set down the Gould and Curry as a regular dividend paying mine.

Chollar is quoted at the Board the past week at the uniform rate of \$355—in Bates and Williams' Circular, the following quotations are given:—20 shares at \$360—12 at \$365—20 at \$370. The decision of the Supreme Court in the Chollar vs. Potosi is expected this week.

Potosi has steadily advanced the past week under the expectation of a compromise. It has gone steadily up from \$70 to \$100, at which last quotation Sanborn & Co. quote a sale of 30 shares.

Sierra Nevada has advanced \$20 on last weeks quotations, and rests at \$78. This advance has been caused by a report that very rich ore had been struck in the mine. Should this report be confirmed further advances may be looked for this week.

## Coso Stocks.

The Josephine had bidders, the past week, at the Stock Board at from \$15 to \$15½.—Holders asking \$20 to \$25. Coso—\$20 asked. Willow Springs—held at \$45.

## Mexican Mines.

St. Nicholas Silver Mining Co. is quoted by Sanborn's Circular at \$100. Mina Prieta finds no recent buyers, but is held at \$110. Dios Padre is quoted at from 30 to 33 dollars.

## WASHOE STOCK REPORT.

[Compiled from the Daily Territorial Enterprise.]

The Territorial Enterprise says that the passage of the Incorporation Bill, created, at first, something of a flutter in the Stock Market, at Virginia City; but as a large class of permanent citizens, there, are satisfied that the Bill will eventually work to the advantage of the mineral development of the Territory, operators generally look with complacency upon any immediate disadvantage, fully satisfied that money invested in mines there will be as amply protected under the Territorial laws, as under the laws of California. The Enterprise intimates that the mines will be more rapidly developed, more satisfactorily developed, more intelligently managed under the eye of a resident board of Trustees, than they ever could be under the past system of absentee managers.

We trust the speculations of the Enterprise may be correct, but we apprehend that time will show that the Nevadans have made an impolitic move. San Franciscans will not go to Washoe to live for the sake of investing their money in the silver mines, but they ever so rich.

Accounts from the coal mines near Palmyra are of a more favorable and reliable character than at any time during the progress of their development. The developments which are now being made are such as tend to show in a more practical manner the real merits of the mines. The Pioneer Company have taken upward of fifty tons of coal from their claims—An amount sufficient to thoroughly test the quality of the article—which has been used at several mills at Silver City, and is found to serve well for fuel, and is afforded at less expense than wood can be. This company is said to have prospected a sufficient amount of their ground to prove beyond a doubt the permanency of the mine. The ledge is some three feet in width, dipping at an angle of forty-five degrees, affording a better quality of coal the deeper they descend.

There appears to be less activity in stocks than usual, without a basis on which to calculate transactions. There will not, probably, be a general demand for stocks before Spring. Sales made during the Winter will be at rates equally low as at present.

Nevada, on the 16th was offered at \$7 50. A small transaction is reported at these figures.

Inquiry was made for North American, but at figures below selling prices. Mount Davidson is offered at \$6—the highest bid, \$4 50.

Cedar Hill Tunnel stock is offered at \$6. It is saleable at \$5.

Wyoming is quiet. Prospect for a ledge in these claims are less flattering than on first discovery. The company continue to drive a cut in the direction of the supposed ledge, and will soon reach the point wherethe rock was found on the surface.

The Savage (south continuation of the Gould & Curry), a claim scarcely known in the San Francisco market, has suddenly leaped into notice and high favor, and fifty feet were sold on the 17th ult. at \$60 per foot—

The following stocks, not enumerated above, are in the market in Virginia City, and held at the figures annexed:—

Santa Fe	\$25 00	Summit	\$5 00
Empire	6 00	Washington Leds	6 00
McBee	25 00	Milton	20 00
Belvidere	15 00	Laboring	15 00
Peyton	25 00	Sweeney	25 00
Burgan	4 50	Caledonia	8 00
El Dorado	70 00	St. George	4 00



## GIFTS, DONATIONS AND SUBSCRIPTIONS

To the work entitled "THE METALLIC AND AGRICULTURAL WEALTH OF THE PACIFIC STATES." The publisher desires to thank the several gentlemen whose names are hereto appended, for their munificence and aid in behalf of this important work.

Samuel Brannan, Esq., Citizen.  
John Parrot, Esq., Banker.  
Hyam Joseph, Esq., Citizen.  
Ira P. Rankin, Esq., Collector of Customs.  
S. H. Parker, Esq., California Postal Agent.  
S. C. Bradshaw, Esq., Pacific Metallurgical Works.  
David Henriques, of the Board of Stock Brokers.  
Rev. Dr. E. Cohn,  
Rev. Dr. H. M. Bien.  
J. M. Mugarietta, Mexican Consul.  
H. Meyers, Citizen.  
Henry M. Hale, City and County Auditor.  
Dr. J. C. Tucker, of Steamer Moses Taylor.  
Dr. J. W. Van Zandt.  
James Hitchens, Supt of Willow Spring Mine.  
G. F. Deetken, Supt Metallurgical Works.  
E. Torres, Ex-Mexican Minister.  
M. Lebatard, Merchant, San Francisco.  
Greenberg & Mandel, "  
A. B. Stanford & Co., "  
J. Seligman & Co., "  
B. Hamburger, "  
Levy Strauss, "  
M. & J. Steinhart, "  
L. King, "  
S. Rosenblatt, "  
Herman Gerstung, "  
Henry Newstadter, "  
Uhlfelder & Cahn, "  
Wm. Meyer & Co., "  
Hecht Bro. & Co., "  
H. Cohn & Co., "  
Scholle Bro's, "  
I. Bluxome, Jr., "  
Lazard Freres, "  
Chas A. Crane, Esq., "  
E. H. Washburn, Tax Collector, San Francisco,  
Jas W. Bingham, Clerk Board Supervisors, S. F.  
C. Bartlett, Clerk Probate Court, S. F.  
M. C. Blake, County Judge.  
Rev. Thos Starr King,  
Dr. L. C. Lane, M. A. Prof. Pac. University.  
John Levy of Braverman & Levy, Importers.  
Dr. J. B. Beers, Dentist,  
William Fell, Esq., of Nevada Territory,  
H. F. Teschemaker Esq., Mayor, of San Francisco.  
Gen. R. M. Drum, Insp. Dep. of Pacific.  
R. B. Woodward, Proprietor of What Cheer House,  
Dr. S. W. Kellogg, of Kellogg, Hewston & Co.  
A. H. Houston, Contractor,  
Alsop & Co. Bankers,  
St Losky, Levy & Co., Tobacconists,  
Macondry & Co, Commission Merchants,  
Thos N. Cazneau, Com. of Emigration,  
H. B. Platt of Platt's Music Hall,  
John J. Hucks, Manu acturers,  
Thos Baugh, Prop. Merchant's Exchange.  
E. Dupres, Broker, San Francisco,  
William Schmolz, Coiner, U. S. B. Mint.  
Robert J. Stevens, Supt. U. S. Branch Mint,  
Conrad Weigand, Assayer "  
Henry Baker, Cashier "  
W. B. Gould, Weigh Clerk, "  
Ogden Hoffman, U. S. District Judge,  
Wm. H. Sharp, U. S. District Attorney,  
Wm. H. Chevers, " Clerk,  
Harvey S. Brown, Attorney and Counsellor.  
F. A. Fabens, Esq. Attorney.  
T. W. Park, Esq. "  
Byrne & Freelon, Attorneys & Counsellors,  
Harvey S. Brown, "  
Gregory Yale, "  
P. W. Shepherd, Ass; Dist. Atty.  
T. Dame Pres S. F. and S. J. R. Road Comp.  
W. Hayes of Stanley & H.  
A. Kohler  
John E. Kincaid Contr.,  
W. W. Dunn Machinist  
W. L. Booker H. B. M. Consul  
Ant. Forrest H. I. M. V. Consul of France  
H. Behr Dr. Consul Saxte Anhalt  
Steinhart Bro.,  
Greenhood & Newbauer  
E. L. Goldstein  
S. W. Moore "  
H. W. Wadsworth  
W. B. Cooke  
Lent Sherwood & Co.  
Stein Simon & Co.,  
F. W. Bayeque  
And. J. Moulter Sup't. Publ. School Cal.  
Dr. Isaac Rowell Prof. Chem. etc., P. M. Univ'y

We would call the attention of our readers to the Stock Report which we give from week to week in the columns of the Press. This report is very full and carefully made up from the most authentic sources, embracing all attainable transactions both in this city and in Washoe. Our report, for this city, embraces a full statement of the sales at the Stock Board—each day's operations being presented in a tabular form. We also re-produce the substance of the several Mining Circulars issued in this city. In order to give each week's transactions, full and complete, we have changed our publication day from Saturday to Monday. We intend to make each number of the Press a full epitome of the mining intelligence of the previous week, and add thereto such matters of general interest and information as shall be thought useful and advantageous to the miner, the mechanic and, in short, to every seeker after useful and practical knowledge.

THE GREAT WORK BY JULIUS SILVERSMITH.—The publisher desires to thank the following journals and periodicals that have made kind mention and said a word of encouragement for his mission and his gigantic undertaking. The journals alluded to are the *Daily Alta California*, *Herald and Mirror*, *Morning Call*, *San Francisco Abend Post*, *MINING AND SCIENTIFIC PRESS*, *Weekly Gleaner*, *San Mateo Gazette*, *Solano County Herald*, *Dutch Flat Enquirer*, *Washoe Times*, and *Sacramento Dispatch*.

SOMETHING NEW.—A room has been set apart in the Occidental Hotel, of this city, as a branch telegraph office. The wires from which connect with the State telegraph office, several blocks distant. This arrangement has been devised for the convenience of the visitors and occupants of the house, who may thus transfer their messages to any part of the Union without leaving the Hotel.

## Important Publication.

We have been favored, by the publisher, with the title page and prospectus of the quarto work entitled, "The Metallic and Agricultural Wealth of the Pacific States." The editor of this work has recently disposed of the "Mining and Scientific Press," with the view of devoting his entire attention to the publication of the work; to this end he is making arrangements for an early visit to the Atlantic States and Europe. The work if carried out according to the prospectus, will be one of the most valuable publications yet presented to the public, and will prove of incalculable benefit to California and the Pacific Coast generally, in bringing the immense mineral wealth of this region more prominently before the Capitalists of Europe. The object is a laudable one and ought to be encouraged. Mr. Silversmith is one of our oldest citizens and is well acquainted with the subjects of which he treats. He desires but little aid and that we trust he will readily obtain. The following is the prospectus:

## PROSPECTUS TO THE PEOPLE OF THE STATE OF CALIFORNIA, OREGON, AND ADJACENT TERRITORIES.

The Subscriber, one of your earliest citizens of California, and for the most of his time engaged as a journalist, and particularly of late in a journal devoted to the chief resources of the Pacific States, respectfully submits the following plan and proposition for the purpose of bringing hither from England, France and Germany the working classes, mechanics, artisans, miners, and metallurgists for the purpose of developing the resources of our thinly populated States and Territories, thereby reducing labor, the establishing of factories, the occupation of the millions of acres of arable land now lying dormant, and to work our mines. The benefits accruing to our country from the emigration of the merchant, the mechanic, the miner, the mining companies and professional community, cannot but be beneficial, provided the facilities are offered to such emigrants, and according to the tenor of our laws governing such. For these purposes the subscriber desires to seek only the necessary or pecuniary aid to take him across the Pacific and Atlantic, so that he may be enabled to lay before the people of Europe a work which he has compiled from authentic sources, comprising the mineral wealth of the Pacific States, including partly Mexico, Lower California, British Columbia, etc., together with a synopsis of the climatology, agriculture, arts and manufactures, with interesting statistics of our imports exports, and population. Also, the organic acts of our State, the local and general laws governing mining, the Pre-emption Act, and kindred subjects pertaining to the Pacific States. The author reserving for himself the right of translation of this work (which has cost him three years of his time to collect and compile) in the German and French languages.

He contemplates making the tour to the Atlantic States and Europe in February or March, 1863, and will equip himself with the mineral materials, fossil remains, etc., and illustrate them by diagrams and discourses throughout the Atlantic States and Europe.

Such a work which your petitioner has in view cannot be published in this State without an extraordinary outlay, nor have we the materials, artists or skill in copperplate or wood engraving. The work will comprise from 400 to 500 pages, to be handsomely illustrated with colored plates, maps, etc., quarto form. The subscriber will add thereto a complete list of all the associations and companies, especially mining companies.

He goes to Europe for the purpose of seeing all the manufacturing places, machines and utensils; also to the leading mining districts and metallurgical establishments, to acquire from the best sources there the best mode of treating our rich minerals, and lay these several important features before our people through the Mining and Scientific Press, and the work he hereby offers. But the most important subject in his mission is the inducement he will offer to Europeans of our immensely rich mining fields and agricultural lands, together with the great advantages offered by a liberal and protective government for industrious citizens.

The subscriber, therefore, calls upon the citizens in the Pacific States who have the interests of our new States nearest their heart, to aid him in this grand but laudable undertaking with means. Each subscriber will be furnished with a copy of this work, which is designed to be useful in the counting house, to the professor and miner. The author desires to state that whatever aid or subscription he may be furnished with by the people of this State he will refund after the publication of the work, or leave the amount to be taken out in books.

Respectfully submitted,

JULIUS SILVERSMITH.

RECENT PATENTS.—Granted to CALIFORNIA INVENTORS through the Pacific Patent Agency, J. SILVERSMITH, Solicitor:

HERMAN CAMP.—Patent for Quartz Crusher and Amalgamator.

W. H. RICHARDSON.—Patent granted for Washing Machine.

E. E. MATTESON, Nevada: *Hydraulic Derrick*. This invention has been illustrated in this journal, and has obtained great celebrity throughout the State.

ELANDER HEATH, San Francisco, *Spiral Spice and Sage Mill*. See "Mining and Scientific Press," June 9th, 1862, Vol. V., No. XIII.

G. F. DEETKEN, formerly of Nevada: *Apparatus for separating Gold from Pyrites*. This is one of the most useful inventions of the day. Mr. Deetken has successfully worked sulphurets for a number of years in Nevada county, professes to have obtained greater results than others engaged in the same occupation. Mr. D. has recently established himself in this County, on the San Bruno Road, near the Islais Creek, where he has erected chemical and metallurgical works.

## Routes and Fares from San Francisco to Foreign and Domestic cities.

*Pacific Mail Steamship Company*—Steamers leave for New York via Panama, on the 1st, 11th and 21st of each month. 1st cabin, \$250; 2d cabin, \$200; 3d cabin or steerage, \$100.

*Nicaragua Steamship line*, Ross, Dempster & Co., agents. —Steamers leave for New York via isthmus of Nicaragua, on the 21st October, and semi-monthly thereafter. Price of fare not yet stated.

To Portland, Victoria, &c., \$60. Crescent City, Trinidad, &c., \$20 \$30. San Diego, Monterey, and Los Angeles, \$20 to \$30. Sandwich Islands, per sailing vessels, \$100 to \$150. Australia, sailing vessels, 1st class, \$250 to \$300, China and Japan, sailing vessels, 1st class, \$200 to \$250. Mexico, \$30 to \$50.

*California Steam Navigation Company* dispatch steamers daily to—Sacramento, \$5; Stockton, \$4; Peta'uma, \$3. *Overland Mail Company*—Stages leave daily for St. Louis via Salt Lake; fare, \$200.

## THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years. Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hacknied course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone."

"I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who converse there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonable.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts," or removal of the Lens by absorption or extraction;—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.



**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company, at Aspinwall.

**FOR PANAMA,**

The following Steamships will be dispatched in the month of December 1862:  
20th—SONORA, W. F. Laidig, Commander.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York

For freight or passage, apply to

**A. B. FORBES, Agent.**

Je4

Corner of Sacramento and Leidesdorff sts.

**OPPOSITION**

**People's Line to New York.**

**ROUTE CHANGED FROM NICARAGUA TO ISTHMIUS OF PANAMA.**

**Through in Twenty-one Days!!!**

**FIVE DAYS AHEAD OF THE MAIL.**

The fast and favorite *Double Engine Steamship*

**HERMANN, 3,000 TONS,**

**E. HOWES, Commander.**

Will be dispatched for

**PANAMA,**

From Mission street Wharf.

Punctually at 4 o'clock P. M., of

**SATURDAY, - - - - - DECEMBER 20, 1862**

Connecting at Aspinwall by the Panama Railroad,

And thence by the Splendid Steamship

**AMERICA,**

**2,000 Tons.....JEFF. MAURY, Commander.**

The America has proved herself the swiftest Steamship afloat, and in comfort, cleanliness and regulation is incomparably superior to any other running to Aspinwall.

The Moses Taylor is known to be the fleetest ship on the Pacific, and passengers may confidently anticipate making the through trip in 22 days, as obstructions which are said to have been thrown in the way of passengers, by the Nicaragua Government, cannot possibly occur on this route.

**THE PEOPLE'S LINE**

Has been established to meet the universal demand for an

**OPPOSITION,**

And every Californian should give it a preference for the public good, as well as his own private advantage, which will be secured by

**Reduced Fare, Good Accommodations, and Quick Trips.**

This line is intended to be a permanency, and is not put on for the purpose of being bought or driven off. Speed, safety and the utmost comfort of passengers are the main objects. To secure these no merchandise freight (other than specie) will be taken. The MOSES TAYLOR is built with Water-Tight Compartments, and is unequalled for safety as well as speed. For information or passage apply to

I. K. ROBERTS, Agents,

425 and 427 Battery street.

Dec. 1st—St. LOUIS, Captain E. S. Farnsworth,

" 11—GOLDEN AGE, W. H. Hudson, Commander.

**REMOVAL.**

**OFFICE OF THE PACIFIC METALLURGICAL WORKS** is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

**COPPER OBES**—Highest market rates advanced in cash, for shipments.

S. C. BRADSHAW, Agent,

my30 318 California street, near Sansome, up stairs.

**LABOR-SAVING**

**Rock Drilling Machines.**

**TWO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRYMEN.** The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

**HAND, HORSE, AND**

**STEAM-POWER MACHINES.**

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way.

A **FOUR-HORSE POWER MACHINE**, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process.

Address orders to **WM. W. DUNN,**

oc7-3m] Fremont street, bet. Market and Mission, San Francisco.

**H. HOFER, Coffee and Dining Saloon, and Bakery** No. 168 Clay street

bet. Montgomery and Kearny. m1

**C. W. THOMAS, Plaining Mill, California street, facing the Mission R. R**

Depot. San Francisco. m16

**WILL & CO., Importers of Havana Cigars, Tobacco, Special Depot of**

Meersbaum and German Pipes, 226 Front Street. m1

**A. ROMAN & CO.**

WHOLESALE AND RETAIL

**BOOK ESTABLISHMENT.**

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Pigot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Philips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Mitchell.

Liver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weisbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

Together with many other works in this & similar lines

Books imported to order on short notice.

**A. ROMAN & CO.,**

417 & 419 Montgomery Street.

**Gird's BUDDING KNIFE**

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS, OR manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentee.)

sepl-3m San Francisco.

**Zur Beachtung für Erfinder.**

Erfinder, welche nicht mit der englischen Sprache betannt sind, können ihre Mittheilungen in der deutschen Sprache machen

Stizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an:

JUL. SILVERSMITH, Federal Building, Room 23.

**RASCHE & SONS,**

131 Montgomery street., bet. Bush and Sutter,

SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

**PIANOS, SHEET MUSIC**

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

**A. A. GALE & CO., New York;**

**T. GILBERT, Boston;**

**C. MEYER, Philadelphia.**

Whose Pianos they have always on hand, for sale and to rent.

**PIANOS FOR RENT.**

*New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the trade and professors of music.*

au14

**WRIGHT'S PICKS.**



**JOHN WRIGHT**, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

**JOHN WRIGHT, 511 Market street,**

je20 Opposite Battery, San Francisco.

**TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers**

of Wines and Liquors, S. E. cor. Front and Sacramento sts. m1

**D. R. J. B. BEERS—Dentist, 617 Clay street.** All operations on the teeth performed in the most skillful and approved manner. ap16

**KELLY & WADE, Importers and Dealers in Paints, Oils, Turpentine, Etc**

Nos. 105 & 107 California street, Bet. Davis and Front. m16

**Dr. Van Zandt,**  
**Consulting Physician and Surgeon,**

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity. Made Subservient for the Cure of all Nervous and Spinal Diseases.

**THAT THIS PRINCIPLE**, successfully applied to diseased states of the system, has proved the great sought-for necessity, long wanted by physicians, to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

**Too Much Cannot Be Said**

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

**Awaken the Magnetic Life Within Us,**

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electric intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

**No Compromise with Disease.**

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRICAL excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

**To the Ladies of California.**

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct views of the origin of all their maladies. Ladies can consult him with entire confidence, as he is no speculator upon human ills—but is proving himself the only member of the legitimate profession in California who is really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately attuned nervous organism, together with their great sympathetic life, renders him doubly able to assuage those silent complainings which they bear so patiently and so long. No social disquietude need longer afflict our home circles; for he can arouse the stricken energies; restore the wonted tonicity of the body; awaken the melancholic and desponding; arrest those drains which cause so much anxiety; cure those protean maladies which have so long

**Baffled the Skill of Physicians.**

Develop appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength; extreme debility and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exciting the Electro-Galvanic current, together with his remedial measures which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore you to usefulness, and spare you a blessing to your family and to society.

**All the World Over**

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is as necessary to restore the ELECTRO-GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and verified by hundreds of patients who, so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unassailable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, mental and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or cachectic habit of body,

**None Need Despair of Relief.**

If you have ulcers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—depression of spirits which weigh you down—wakefulness that knows no sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you a radical removal of all bodily and mental infirmities, within the scope of disease and man to remove.

**The Eye and Ear Diseases.**

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made those afflictions an especial study, and that he is the only Surgeon on our State, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataract, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29—3m

**FREDERICK KESMODEL,**  
**Cutler and Surgical Instrument Maker**

817 KEARNY STREET,

Between Jackson and Washington streets,

SAN FRANCISCO,

**RECEIVED** a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are all uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.

**FREDERICK KESMODEL,**  
Inventor and Patentee.

ap8 tf



## 50 lbs. MARINE AND Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stoue, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

### 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and coating less than any paint.

### DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUES, Superintendent.

WORKS, North Beach; Office, 318 California st., San Francisco.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,

No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office, no 13 6mo

## V. SQUARZA'S Punch Factory.

MR. SQUARZA IS FAVORABLY known in this State for his Anti-Divorce Liquore and similar productions, as manufactured by him. We may mention that Mr. Squarza is an aid in the chemico-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,
Cognac do.	Whisky do.
Anti-Divorce Punch,	Kirschwasser do.
Coffee do.	Cocoa do.
Pineapple do.	Morning Comfort,
Adonis do.	Kumel,
Kirschwasser,	Brandy Cocktail,
Appetiser,	Anti-Dyspepsia Bitters,
	Ladies' Tears,

And CHAMPAGNES of all brands.

### WASHOE

## Stock Exchange,

N. E. cor. Montgomery & Merchant sts.,  
SAN FRANCISCO.

L. W. NEWELL & CO.,

Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.

### PHILADELPHIA BREWERY,

Second St. corner of Folsom, SAN FRANCISCO

Helscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

Nov 9

## FULTON FOUNDRY & IRON WORKS.

HINCKLEY & CO.,

MANUFACTURERS OF STEAM ENGINES,

Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings, Mining Pumps, and all kinds of Machinery Amalgamators, Etc.

Nos. 47 & 49 First Street,

Between Market and Mission, San Francisco.

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to Iron when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.

D. B. Hinckley, Wm. E. Worth. Wm. A. Field.

## DONAHUE'S

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.

PETER DONAHUE.

LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON.

PALMER, HANSCOMB & CO.,

GOLDEN STATE FOUNDRY AND MACHINE WORKS.

First Street, near Market, San Francisco,

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications.

Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast.

San Francisco, November 29, 1862.

3m

GREAT REDUCTION

IN PRICES.

STANFORD BROTHERS,

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

ap16t

## Holiday Presents!

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

BRAVERMAN & LEVY'S,

621 Washington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. Also,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY,

No. 621 Washington Street,

Dec 29 1m

Facing Maguire's Opera House.

LEANDER RANSOM,

Civil Engineer

AND

SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets.

oc7-3m

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,

Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

## For Sale Cheap!

A HORIZONTAL STEAM ENGINE OF 4 Horse Power, Flue Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,

Federal Building, cor. Battery and Washington Sts. Room, No. 23.

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS OF ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."

F. G. BEPLER,

Practical Coppersmith

No. 118 (Old No. 23) Bush street,

Between Sansome and Battery, SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work. All orders from the country promptly attended to.

## DEETKEN'S

Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose.

nov8-3m

SQUARZA'S PUNCH.

HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff St., near Sacramento.

Branch at 406 Montgomery street. my30

JULIUS SILVERSMITH,

Commissioner for Nevada Territory,

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets.,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

JAMES PHELAN,

(Late J. & M. PHELAN.)

IMPORTER AND JOBBER,

Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-tf.

THEODOR KALLENBERG,

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamp Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.

No. 4 Sansome street, corner Market,

au7-3m) San Francisco.

DEVOE & COS.'

STEAM ENGINE

—AND—

MACHINE WORKS,

Corner Market & Fremont streets,

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILLS, Irons, Flour Mills, Quartz Mills etc., etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT CUTTING. AGRICULTURAL MACHINERY made and repaired. Duplicate parts of Threshing and Reaping Machines and Threshing Teeth made to order, on the most reasonable terms.

Steam Engines and Boilers constantly on hand, and for sale cheap. Screw-Cutting and Turning Lathes for sale.

DEVOE & CO.



# Mining and Scientific Press.



A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, MONDAY, JANUARY 5, 1863.

NO. 10.

## NECESSITY FOR COOPERATION AMONG SILVER MINERS.

We would call the especial attention of miners, especially those engaged in silver mining, to the following article which we clip from the *Virginia City Union*. The business of silver mining is one, above all others, which demands a high degree of scientific attainment, the closest attention to its detail, and calls for the fullest and most free interchange of experience among those engaged therein. The absence of mining schools, where men can be properly educated for mining superintendents and engineers, is already beginning to be sensibly felt among our people. It must be conceded that we have but very few among us, who are properly qualified to carry on, successfully and economically, this difficult and intricate branch of mining. In no way can the absence of such needful skill be so fully provided against, as by carrying out the suggestions contained in the following article from the *Union*. Will not the mill men and miners of Virginia City take the initiatory step, and effect an organization, for the above purpose, which shall be the forerunner of many such, on all parts of the Pacific Slope.

Our people are engaged in a pursuit, the working of silver ores of various character, that requires scientific knowledge of the highest order inasmuch as they are dealing with problems in chemistry which only the most experienced metallurgists and chemists can, at times, hope to solve successfully. We have tried dry and wet crushing; hot water in the pans and steam in the tubs and pans; steam in false bottoms; all sorts of mullers, smooth bottom pans and pans with arastra bottoms to deposit the amalgam in; much quicksilver and little; we use salt and sulphuric acid, sulphate of copper, muriatic acid, copperas, potash, soda, sulphate of soda, catechu, lime, pyroligneous acid, &c. Now, who among all our mill men can tell the definite and specific object to be achieved by the use of any or all of these various processes and chemicals? We have tried the Veatch, Sagebrush, Hatch, Patio, Smith & Dewey, Jones, McCullough, Frieberg, and many other processes, and who among us can tell which one is the best of them all and what are the comparative results therefrom obtained? Who can tell the chemical analysis of the ores of Gold Hill, Ophir, Gould & Curry, Potosi, Silver City, Flowery, Humboldt, Veatch Mines, Esmeralda or Silver Mountain, all differing in chemical character, yet all silver ores and worked by the various processes in vogue in this Territory, the results of which whether successful or otherwise, are kept strictly private. Now this is a short-sighted and stupid policy and should be once abandoned.

This business is one calling for all the lights of experience and the resources of science—far more so than the working of the gold ores of California, that being merely a mechanical operation. It may be conceded that we have but few truly scientific men among us, and who could solve the questions proposed; nevertheless, it is only by admitting our ignorance in any case, and asking questions—seeking knowledge, that we can hope to solve any difficult problem. It seems to us that in the present state of mining and scientific knowledge, much good might accrue if the mining and mill men would form themselves into a society for their mutual improvement; just as the farmers in the Atlantic States form clubs, and meet say once a week or month, with certain definite subjects to be discussed, each one willing to contribute to the common stock of knowledge that he has gathered from his experience. So in the opening of mines or the working of ores from the various mines, whether the results are successful or not, we should know it; for it is not alone successful results that point the way to safety,—we need to

know where the shoals and rocks are as well as the deep water. Meetings of this sort might be made interesting and a means of great utility, if rightly carried on. With the present long evenings men have much leisure, a portion of which might well be devoted to inquiries of this kind.

As at present conducted comparatively little useful knowledge is derived from our mining operations, each one working apart, and keeping the results of his work to himself. One man knows little or nothing of the experiments made by his neighbor, and may be treating his ores to great disadvantage; whereas by the knowledge of some simple fact or agent in the possession of the other, he might attain to success.

If by the use of any chemicals he can remove the sulphur from his ores, leaving his silver a sulphate it does not follow that it will amalgamate with quicksilver, for his sulphate would be found by the application of salt to be held in solution in the hot water in his vats. If the gold of the Gould & Curry is associated with tellurium and will not amalgamate, and he finds that some one mill man uniformly gets more gold from the same class of ore, but by a different process than he does, he has a clue that, followed up, may make "two blades of grass where but one grew before." If the Patio process is a success in itself, adapted especially to the Comstock ores, working them cheaply and with certainty of profitable results at all times of the year in this climate, we may find that out, or whether there are any insuperable difficulties in the way. If the Ophir, Central, California, Gould & Curry and others on the Comstock are, as I believe, shipping to Europe their first class ores, because the results obtained by them are not sufficiently near to assay returns to justify them in working them here in the present state of metallurgical science, but rather fully justify the expense of shipment to San Francisco, the crushing there, perhaps, assay and aale there, then we need to know it, for the difficulties do not alone concern the owners of the ores. They are matters of public interest—for the employment of labor here and incidental growth of the place are synonymous, and go hand in hand in every community; and as Americans it becomes us, if we have not the science to-day to achieve the results of the smelting works of Europe, to have it by importing the science rather than exporting the ores.

**BRIDGING THE ENGLISH CHANNEL.**—Mitchell's *Steam Shipping Journal* says a project for a railway ferry-boat from Dover to Calais will be shortly before the public. The ferry-boat is to be 3,000 feet in length, 100 feet beam, and draw but 5 feet of water. In the centre of the deck will be a covered iron tunnel, into which the carriages will steam, with goods and passengers, to be conveyed across the Channel with considerable rapidity. The speed is to be 40 miles per hour. She will have rudders at both ends, and will never require to turn. Her build is to be that of a series of un-sinkable tubes.

**ANOTHER NEW JOURNAL.**—The California Wine and Wool Register is the name of a new 16-page monthly journal, to be published at Sacramento on and after January 1, 1863, by J. Q. A. Warren, the well known California journalist.

**COPPER MINING COMPANY IN NEVADA COUNTY.**—A company has been organized in Nevada called the "Consolidated Gold, Silver and Copper Mining Company." It has located 30 claims on the lead, or 3,000 feet.

**THE HESPERIAN** for January, has been laid upon our table. It is quite as interesting as usual, and especially valuable to all interested in the fashions and polite literature. Accompanying the Magazine is the usual paper pattern which has come to be such a welcome monthly present to the ladies.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the *MINING AND SCIENTIFIC PRESS*? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the *PRESS*, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the *MINING AND SCIENTIFIC PRESS*. We invite all to send us their names and *four dollars*, or *two dollars* for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the *PRESS* for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short time.

The news of the capture of the *Ariel*, which was telegraphed across the continent immediately after the arrival of the Constitution at this port, on Saturday last, created a decided sensation in New York and Washington. Senator Latham promptly introduced a resolution into the Senate to send a war vessel to protect the California Steamers. The Connecticut sailed from Fortress Monroe, on that errand on Thursday last. Government will either bring the treasure at stated times in a war vessel or accompany the steamers with an escort. New York and the East is more directly interested in this movement than California. For if our merchants cannot safely send their gold to New York, it must of necessity remain here, which it cannot do without important benefits accruing therefrom to the industrial interests of this State.

**EASTERN TIMBER FOR CALIFORNIA.**—Oak timber is now being cut, in large quantities on the Mountains near Manchester, Vermont, for the California market.

**ELECTRICITY AND CHLOROFORM.**—An eminent French physician, at Paris, has discovered and announced to the world that an electric shock is sure salvation to any-body dying from the effects of chloroform.

It has been found on careful investigation that buildings often take fire from the hot air of furnaces, in consequence of the wood work being too near the register. Both hot air and steam pipes, if they come in contact with wood, will in time set fire to it, and persons cannot be too careful in putting furnaces into their houses.



## MINING NOTABILLIA.

**THE HUMBOLDT MINES.**—A full account of the progress of work upon the famous Sheba mine of this district will be found in another column.

A correspondent of the *Sacramento Union* writing from Unionville in this district says that work is being vigorously pushed by the Mars, the Original, the Alamo, the National and the Oroville companies. The Original has taken out a large quantity of ore, and delivered a portion at Price & Falls mill which has probably commenced crushing by this time. The National, also, has a quantity of rock at the mill. Much anxiety is felt to learn the result of these crushings.

The same correspondent has seen specimens of coal, recently discovered on the Emigrant road, at Rocky Ridge, on the Humboldt, about fifty miles above Unionville. The coal burns freely and is undoubtedly a valuable discovery. A company has been formed for working it, consisting chiefly of Sacramentans. In one of their shafts they have struck a stream of strong sulphur water, which is covered with a heavy film of oil.

**THE ALISAL MINES.**—The Alisal silver mine, recently discovered in Monterey county by Joaquín Torres, is located five miles east of the old mines, which were worked successfully in 1806 and 1812. The vein was lost many years ago, and has but recently been recovered.

**THE NAPA QUICKSILVER MINES.** It is said bid fair to turn out very valuable. The severe storms of last winter damaged the roads to such an extent as to render it impossible to put them in condition for hauling machinery to these mines until late last spring. Nothing was indeed done in the way of obtaining a practical test till within the last six or eight weeks—during which time six retorts were put up and in twelve days retorted 162 flasks of an excellent quality of quicksilver. An additional number of retorts are about to be put up, and other preparations are being made to work the mine on an extensive scale. The company are sanguine of having a "good thing."

**THE REESE RIVER QUARTZ MINES,** according to a Simpson Park correspondent are very promising. New leads are being discovered and old ones being rapidly developed. A recent correspondent of the *Virginia City Union* has examined some very rich ore from veins discovered but a day or two previous to his writing, which he pronounces rich.

**MINERAL SALT.**—The editor of the *Virginia City Union* has recently examined some specimens of salt from a newly discovered deposit on the Washoe and Humboldt road, a large portion of which is nearly or quite pure. The deposit is represented as from 50 to 100 feet in width, and can be traced over a mile. Mr. Dickey, of the Ophir mine, gives it as his opinion that the salt is much superior to that brought from the Walker river region, and quite equal to the best from San Francisco. The location is very accessible. A company is now being formed to open and work these mines, which will undoubtedly prove very valuable. A large quantity of salt is annually consumed in the silver mines of Washoe, for the reduction of ore, and it is expected that this discovery will soon materially reduce its price. The location of this deposit is 100 miles from Virginia City, 100 miles from Reese River and 30 to 40 miles from the Humboldt mines.

**THE EL DORADO COMPANY.**—The *Territorial Enterprise*, of Dec. 24th says this company have struck very fine ore in their mine, some specimens of which it is difficult to distinguish from Ophir or Gould and Curry rock. This strike not only enhances the value of the claim in which it is made, but is encouraging to those owning veins in the same range, and will also operate to increase the price of feet throughout the entire neighborhood. There are one or two other companies in the immediate vicinity, that certainly stand a very good chance of finding the same rich strike in their mines.

**CALIFORNIA BORAX COMPANY.**—The articles of incorporation of this Association have been filed. The object of the incorporation is the mining and manufacture of borax, sulphur, and other minerals, in California. Capital stock \$300,000, in 300 shares, of \$100 each. Trustees: William O. Ayers, Lafayette Maynard, Solomon Heydenfeldt, and Frederick Billings.

**MINING ON THE COLORADO.**—Rich mines are being discovered on the Colorado, from Chimney Peak to El Dorado Canon; thence in a northwesterly direction to the "Slate Range." It is said by those who are posted that Washoe will before long find a rival in this section of the State. Within the last few weeks new veins of silver have been discovered in the "Slate Range," which yield most astonishing results. From El Dorado Canon rich veins, which were discovered over a year ago, have been thoroughly tested since J. R. Vineyard erected his mill there, and the yield is very great. The veins are numerous, and so far as tested, appear to be equally rich in both silver and gold. The mines on the Lower Colorado have not been so thoroughly tested, in absence of mills, as those higher up, but the assays are equally as good as any of the others.

Should these mines prove to be in the end as good as they now prospect, it will be the means of bringing a population to this region, with a sprinkling of energy and capital, to keep matters moving. It requires some such contingency to regenerate this country and bring into it a people, the majority of whom are business men in the real sense of the word. Under such a state of things this section of the State will be really what it has been represented, and not the imaginary paradise it at present is.

**THE SAVAGE COMPANY.**—The types in our Stock Report of last week made us say that 50 feet of this Company, which adjoins the Gould and Curry, were sold for \$60 per foot—it should have read \$600, a very material difference. A large amount of work is now being done by this Company in the way of erecting buildings, hoisting machinery, and making preparations for an extensive and vigorous working of the mine. The hoisting apparatus is the most complete and substantial in the Territory. The shaft is 12 feet by 4 in size, walled up with three inch plank doubled-grooved at the ends. There will be three compartments, each four feet square—two for ore, and one for pumping water. It is now down 170 feet, and will perhaps reach a depth of 250 when the lead will be tapped and worked from below. The workmen have passed through the Comstock lead in going down, and are now twenty to thirty feet east of it.

**THE HUMBOLDT SILVER MINES.**—Roughly estimated, it may not be far out of the way to estimate the number of leads struck in the Humboldt at 2500—including the extensions already developed. But subtract from this amount any number which incredulity may suggest, and we shall have a sufficient number of paying veins which when fully developed will elevate this new mining region to an importance but little, if any, short of Washoe. When we look at the collective whole of the mining resources of the Western Slope, the imagination can scarcely conceive of its prospective value to our national progress. Developed and worked as this region soon will be, by the energy and enterprise of the Anglo-Saxon, it will far exceed in importance the rich fields of Mexico and Peru which, in their day, completely revolutionized the commerce of the world. Even when we look at it in the cold, calm light of business and philosophy, and allow the widest margin for difficulties and uncertainties, we can scarcely calculate the values that lie undeveloped in the barren wastes of the Western Slope.

**SILVER MOUNTAIN.**—A correspondent of the *Virginia Union* from this region speaks very encouragingly of its prospects, and narrates the following singular circumstance:

Messrs. Marks and Bradbury, while prospecting on the Esmeralda ledge in this District, came upon an old drill-hole, with fuse still in it, covered with debris to the depth of several feet; while three-fourths of a mile further up the river, in the Monitor District, there is a shaft some ten feet deep, showing that these early prospectors, whoever they might have been, were aware of the existence of gold-bearing quartz at this place, but finding that it would not pay, and being ignorant of the existence of silver in the rock, abandoned it.

Mr. Marks lately sold 100 feet in the Esmeralda ledge for \$1,750, to a San Francisco company, who are to erect a mill here in the spring for crushing the rock. Bradbury has sold out entirely, but for how much I cannot ascertain, though it is reasonable to infer it was a large sum, as he was known to have plenty of money before leaving for the East. Placer diggings were worked near here from '55 to '58, by various parties.

## Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent Right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

PACIFIC PATENT AGENCY....J. SILVEESMITH,  
SOLICITOR.

## MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise.

Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c., &c.

Light's New Patent Insulated Iron Frame is put into all of

Light & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,  
FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

A. KOHLER, Agent.

## LATEST IMPROVEMENT

In LADIES' BUCKLES.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at our address,

FREDERIK REICHEL,

Manufacturing Jeweler,

620 Merchant street, San Francisco.

## INTERNATIONAL HOTEL

Jackson street, a few doors above Montgomery, San Francisco.

The oldest Established First Class House in  
SAN FRANCISCO

FIRE-PROOF BRICK BUILDING.

FOSTER & COLEMAN, Proprietors.

Most convenient to the Steamers' Landings, business streets,  
and places of Amusement.

Open all night.

NO DARK ROOMS! EVERY ROOM OPENS TO THE LIGHT AND AIR.

Every room is furnished with a first quality Patent Spring Bed and Hair Mattress, and are superior to any other Hotel in the State.

The International offers to guests the greatest number and best furnished Family Rooms, and also sets the BEST TABLE OF ANY HOUSE IN THE CITY.

THE..

## NEW ENGLAND SEWING MACHINE for \$25!

THIS MACHINE stands confessedly at the head of everything now before the public. In cheapness, neatness, compactness, durability and beauty, it has no rival. It is made with special reference to the wants of a family, and any one with the aid of the printed directions can learn to work it successfully in a few hours. It will work from leather to the finest cambric without the change of needle, tension, or feed. It gives the best satisfaction where it is sold, and all who use or examine pronounce it better adapted to meet the wants of every family than any other machine now offered to the public. Gauge and hemmer attached.

Every machine warranted, and kept in order free of charge. This is the only cheap machine that will do all kinds of family sewing.

STEWART & SHEAR, General Agents,

No. 60 Second street.

sep11

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T.

my23

PALMER, HANSCOM & Co. Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market.

my23



## SAN FRANCISCO MINING NOTICES.

**Mina Prieta S. M. Co.**—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

**Savage Mining Co.**—The Annual Meeting of the Stockholders of this Co. will be held at Office, 712, Montgomery St. Jan. 13.

**Union G. & S. M. Co.**—The regular quarterly Meeting will be held, at Office, 410, Montgomery St., Jan. 19.

**The Madison G. & S. M. Co.** advertise names of parties who are in arrears for assessments, and give notice that their stock will be sold on the 29th day of Jan. unless said assessments are previously paid.

**Franco-Americano S. M. Co.**—The following persons were elected officers at the meeting of trustees, Dec. 26th—Chas. F. Gaian, *President* and A. S. Gould, *Secretary*.

**Sierra Nevada S. M. Co.**—The annual meeting for the election of Trustees will be held at office No. 40, Montgomery Street, Jan. 12th.

**St. Louis G. & S. M. Co.**—The Annual Meeting for the election of Trustees will be held at office No. 40, Montgomery St., Jan. 10th.

**Lucerne Mining Co.**—The Annual Meeting for the election of Trustees will be held at Office 114, Battery St., Jan. 12th.

**Central Silver Mining Co.**—The Annual Meeting for the election of Trustees will be held Jan. 13, at Office, No. 712, Montgomery street.

**Lady Bryan G. & S. M. Co.**—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

**Desert Mining Co.**—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

**Wide West Mining Co.**—The Secretary of this Company publishes an important notice to Stockholders, in the daily papers.

**Reese River Mining Co.**—Ten cents per share has been levied upon the capital Stock of this Company, payable Jan. 14th.

**San Francisco S. M. Co.** have laid an assessment of \$25 per share, payable on or before Jan. 1st, 1863.

**Pacific Quicksilver Mining Co.**—Assessment No. 3, of \$1 per share was levied, Dec. 22, payable immediately.

**Keystone Copper Mining Co.** advertise for preposals to purchase or treat 3d quality copper ore. Proposals received till Jan. 15th.

**Mammoth Ledge Mining Co.** give notice of an assessment levied and payable on or before Jan. 13th. Also that the first annual Meeting for the election of Trustees will be held at office, Jan. 17th.

**MINERS' MEETING.**—At a meeting of the shareholders of the Siegel Mining Company, it was resolved that a meeting be called of all the miners of the Siegel Mining District, for the purpose of making laws by which said District may be governed, and that said meeting shall take place on the 15th day of January, 1862, in said Siegel District, in or near a certain place better designated as the Siegel Mining Company's Cabin.

**Hale & Norcross S. M. Co.** have levied an assessment of \$5 per share payable on or before Jan. 26th.

**CHARLES CANY MINING CO.**—An assessment of \$1 50 per share was levied on the stock of this Company, Dec. 14th, 1862, payable on or before January 14th, 1863, at office, 338 Montgomery St.

**LIVE OAK COPPER MINING CO.**—Office, Montgomery Block—An assessment of thirty cents per share was levied, Dec. 1st, 1862, payable in thirty days.

**NORTH POTOMI SILVER MINING CO.**—An assessment of four dollars per share was levied on this Company, Dec. 11, 1862, payable on or before January 16th, 1863, at office, Cor. Battery & Washington Sts.

**MEREDITH GOLD & SILVER MINING CO.**—An assessment of two and a half dollars per share (five dollars per foot) was levied by this Company, Dec. 11th, payable immediately, at office, 712 Montgomery St.

**RED, WHITE AND BLUE G. & S. M. Co.** levied an assessment of 25 cents per share, on the 10th of Dec., payable within thirty days, office cor. Pine and Montgomery Sts.

**BULLION G. & S. M. Co.**—The Stockholders are notified that they will hear something to their advantage by calling at the office of the Company, cor. Pine and Montgomery Sts.

**SIERRA S. M. Co.** will sell at auction, shares on which arrears may be due on Monday, January 5th, by Duncan & Co.

**NORTON G. & S. M. Co.**—An assessment of two dollars per share was levied Nov. 25, payable on or before Dec. 30th, 1862, at office 522 Montgomery St.

**BANNER G. & S. M. Company** has been duly organized. The first annual meeting of the Stockholders of this Company will be held at their office, Dec. 24th, for the election of Trustees, etc.

The annual meeting has been adjourned to the 9th of January.

**Dios Padre G. & S. M. Co.**—An assessment of three dollars per share was levied, Nov. 29th, payable on or before Jan. 1st, 1863, at office 502 Montgomery St.

**EMMETT G. & S. M. Co.**—An assessment of twenty-five cents per share was levied, Nov. 21st and is now due, and payable at office 326 Clay St.

**VIBBARD G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office 326 Clay St.

**DOYLE G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office No. 326 Clay St.

The **Succor G. & S. M. Co.** will hold its annual Meeting, January 6th, 1863, at its Office, Nos. 1 & 2, Montgomery Block.

**Hawley Mining Co.**—Annual Meeting for election of Trustees will be held at Office 204, Front St., on 5th.

**LIVINGSTON G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due and payable at office No. 326 Clay St.

**ISAAC'S G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due and payable at office No. 326 Clay St.

**KOHLER G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now payable at office 326 Clay St.

**EL DORADO G. & S. M. Co.**—An assessment of one dollar per share was levied, Dec. 1st, and payable at office, on N. E. cor. of California and Montgomery Sts., or to Superintendent in Virginia City.

**IOWA MINING CO.**—An assessment of Four Dollars per share was levied, Dec. 4th, payable at office 522 Montgomery St. on, or before Jan. 3d, 1863.

**JOSEPHINE MINING CO.**—An assessment of two dollars per share was levied, Nov. 19th, and is now due and payable at office No. 21 Stephenson House.

**BURNSIDE S. M. Co.**—An assessment of one dollar per share was levied, Nov. 17th, payable within 30 days, at office 712 Montgomery St.

**HAWLEY MINING CO.**—An assessment of 50 cents per share was levied, Nov. 15th, payable at once, at office 204 Front St.

**AMERICAN QUICKSILVER MINING CO.**—An assessment of one dollar per share was levied, Dec. 16th, payable at Company's Office, in Petaluma, within 30 days—At the expiration of which time delinquent Stock will be sold.

**NAPOLEON COPPER MINING CO.**—The first annual meeting of this Company will be held at office N. E. corner of Sacramento and Montgomery Sts., on Monday, January 12th 1863, at 8 P. M.

**MADISON G. & S. M. Co.**—The books of this Company are open for issuance and transfer of Stock, at 608 Merchant St.

An assessment of two dollars per share was levied on the Stock of this Company, Nov. 13th, payable at once.

**BURNING MOSCOW S. M. Co.**—An assessment of Two Dollars per share was levied, Nov. 25, for the purpose of defraying expenses of steam pump and machinery now being erected to drain the mine. Prompt payment is requested at the Company's office, corner of Montgomery and Jackson Sts., to Jos. P. Nourse, Sec.

## WASHOE MINING NOTICES.

**Caution.**—D. M. Tyrell warns persons against purchasing a certain 10 foot of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

**Ashland Co.**—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

**Eldorado G. & S. M. Co.**—An assessment of one dollar per share was levied, Dec. 31, 1862, payable, Jan. 22, 1863, to the Secretary, at corner of Montgomery and California streets, or to the Superintendent at Virginia City.

**La-Plata Oro Co.**—Gold Hill District.—An assessment of two dollars per share was levied, Dec. 26, payable at once, at Office of the Secretary, Court-house Building, Virginia City.

**Texas Co.**—Tennessee Ledge.—An assessment of 25 cts. per foot was levied, Dec. 22, payable on or before Jan. 21, 1863.

The Regular meeting of the Company for election of officers, will be held at the Comet Saloon, Virginia City, on Saturday, Jan. 21.

The North American Co., Gold Hill, will sell at auction,

Jan. 31, stock of shareholders delinquent in payment of assessments.

**Grass Valley Co.**—A meeting of this Co. will be held at the "Medan," in Virginia City, on Thursday, Jan. 15.

**ASHLAND G. & S. M. Co.**—An assessment of fifty cents per share was levied, Dec. 10, payable at the office of M. J. Power, Sec., B. St.

**UNION COMPANY, GOLD HILL.**—An assessment of fifty cents per foot has been levied, payable at the rate of ten cents per foot, Nov. 15, 22, 29; Dec 6, and 13, at the Company's office, Gold Hill.

**NORMAN SILVER MINING CO.**—An assessment of One Dollar per share was levied, Nov. 19th, payable on or before Dec. 31st, to the Superintendent in Virginia City, or at the office, No. 40, Montgomery Street, San Francisco.

**MARTIN WHITE MINING COMPANY.**—An assessment of ten cents per foot has been levied, payable to the Secretary, at office on C Street, Virginia City.

**THE SWEENEY CO., Gold Hill,** give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

**POORMAN G. & S. M. Co.**—An assessment of Five Dollars per share was levied, Nov. 9th, and another of Ten Dollars per share, Nov. 21, payable at once to the Secretary, R. J. Michel.

**COLEDONIA TUNNEL AND MINING CO.**—An assessment of Thirty-two Dollars per share was levied, Dec. 8th, payable immediately to the Secretary, Martin White.

**THE CHIMNEY ROCK CO.** lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Bach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

**LA CROSSE MINING CO.**—An assessment of \$1 25 per share was levied, Dec. 8th, payable at office 73 C Street, Virginia City.

**HAWK EYE SILVER MINING CO.**—An assessment of 25 cents per foot was levied, Dec. 6th, payable immediately to S. A. Kellogg, Sec. Gold Hill.

**MOHEGAN CO., Cedar Hill.**—An assessment of fifty cents per foot was levied, Dec. 5th, payable forthwith, to the Secretary at Virginia City.

**ORIENTAL G. & S. M. Co.**—The 3d assessment of 15 cents per foot, was levied, Dec. 8th, and is payable at office, No. 31, C Street, Virginia City.

## ESMERALDA MINING NOTICES.

**THE ZENOBIA LODE COMPANY,** give notice that they claim a superior title to the Johnson Co., claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder.

## MINING AND SCIENTIFIC PRESS.

**THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.**

**THIRD YEAR! VOLUME VI.—NEW SERIES!**

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

**To Chemists, Architects, Millwrights and Farmers!**  
This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to architects and millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 50. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

### EVER & SMITH, Publishers,

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



## Mining and Scientific Press.

W. B. EWER, EDITOR.

MONDAY ..... JANUARY 5, 1863.

The MINING AND SCIENTIFIC PRESS is published at the Federal Building, Room 24, corner of Battery and Washington streets, San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance. Advertisements, Fifty Cents per line. A liberal discount made to quarterly advertisers.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOGRAPHY and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspapers in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## AN IMPORTANT MINING QUESTION.

The Supreme Court of Nevada Territory, soon to convene, will have many knotty points of mining law to unravel. One will be whether a mining company, locating a surface claim, for ravine or placer mining, owns all mineral lying under the surface claim. A question precisely similar to this was adjudicated some years ago in the District Court of Nevada County. It was given to the jury, and they found a verdict to the effect that the owner of a surface claim was entitled, by virtue of that ownership to a quartz vein lying under it. But as the quartz vein proved to be of little value, the case was never carried up, and the decision is not regarded as a precedent; besides it was in opposition to the general opinion among miners as to what should be the law. It is a new question, and should be settled in accordance with principles of justice.

The question which now comes up is the action of the Chollar Gold and Silver Mining Company, of Washoe against the Potosi Mining Company. The Chollar claimed a ledge discovered by the Potosi Company, but which ran under surface ground located by the Chollar. On the trial, the Potosi Company insisted that that Company, as discoverers of a silver lead, had a right to follow the lead, with its dips, spurs and angles, wherever it ran. In pursuance of this view of the case, the counsel for the Potosi mine requested the Judge to charge the jury as follows:

"A location for surface and quartz is not a location of a ledge, and if subsequently to such a surface and quartz location another party locates a ledge, with its dips and spurs outside the limits or lines of such surface and quartz location, and discover the ledge, and strike it outside of such lines, then the locator and discoverer of the ledge has the right to follow the ledge, with its dips and spurs, wherever it may go, to the extent of his claim, even if it should run into the lines of the surface location."

The Judge refused to charge as requested; therefore this important case goes to the Supreme Court of Nevada Territory, to determine whether a prior surface location holds all minerals lying under the superficies of ground surveyed out into a quartz or placer mine, irrespective of any ledge.

THE stoppers for the Monitor, building at East Boston, are being cast by the Pembroke Forge, South Boston. There are two to each turret, and they weigh between five and six tons each. These stoppers close the hole when the gun is drawn in to be loaded. They are 26 inches thick, solid iron.

THE Pottsville Miner's Journal says that the total amount of coal sent to market this year is 6,927,997 tons against 6,922,975 tons sent last year, or a gain of 5,022 tons. The amount sent for the last week was 76,969 tons, against 61,418 tons for a corresponding period last year. The Journal adds: "The demand for all kinds of coal continues brisk. The dealers in some of the markets held back expecting the prices to recede, but they have been caught napping, and are now putting in their orders quite rapidly, and every additional steamer built only adds to the consumption of coal."

## COPPER MINING.

To those whose ideas of Copper Mining are associated only with the remarkable copper mining region of Lake Superior, where native copper frequently occurs in masses of many tons weight, and where its presence in smaller quantities is of almost every-day occurrence, the mines of California, with their yield of only 20 per cent, appear but poor in comparison. But when we compare our mines with those of Cornwall and Devon, in England, their richness, is most extraordinary. No advances have yet been made, in this city, on copper ore which assays less than 20 per cent. It is claimed that ores of less value are unprofitable for shipment.

The quantity of copper ore raised in Cornwall and Devon during a period of 126 years, ending with 1855, was, in round numbers, 8,000,000 of tons. During 70 years of this time the average yield of this ore was only eight per cent., yet copper mining was accounted a very profitable business, for both the miner and smelter. The average yield for the ten years next preceding 1785 reached the unusual figure of 12 per cent. During the period of 10 years preceding 1855, the yield fell to an average of only seven and a half per cent. The yield for 1859 was estimated by the authority before us (published in 1857) at only 6 3/4 per cent.—and yet the business was considered remunerative. Indeed in the village of Twista, in the Waldeck, copper ores are worked which yield only two per cent, and at Linz, on the Rhine, and several other localities in Germany, ores are worked which yield only one per cent, and from that to two—all worked in the gross! We propose to give a particular account of these cheap workings in our next issue, this article being too lengthy for them, to-day. Of course, ores of as low yield even as the general average in Cornwall, could not be worked, at present, in California, although we fully believe that by improvements in machinery, and reduction of wages by increase of population and reduced costs of living, the time will soon come when ores yielding from 8 to 10 per cent. may be profitably worked even in California.

The improvements which were introduced into the mines and smelting works from 1840 to 1855 kept the profits of the lower yields of the latter years fully up to those of the higher yields of former years.

The average yield of the entire mass of vein stuff raised in the English copper mines is estimated at only 3 per cent. The ore there, as well as in California, after being raised from the mine, is carefully assorted, not more than one quarter of the total amount going directly to the smelting works. The other three quarters being reduced by washing and assorting to a higher standard of yield before it passes to its final treatment. Of the particular mode of treatment we propose to speak in a future number of the Press.

There is very little if any ore taken from the principal mines in Calaveras county which will not yield 5 per cent., and all the ore ranging from that percentage up to 15 or 18 per cent., averaging, we believe, about three quarters of the entire quantity raised, is thrown aside, as of too low a grade for shipment. The accumulation of these low grade ores at the Keystone, Union and Calaveras mines it is estimated has already reached 20,000 tons, containing fully \$500,000 worth of copper. The Keystone Company has advertised for proposals to treat or purchase this poor class of ore at their mine, and a correspondent of the Bulletin, calls the especial attention of experienced miners and metallurgists to their ores. As remarked by that correspondent, we, also, are "satisfied that by means of water the ore can be reduced to the shipping value, or 20 per cent. A roller and jigg machine, driven by steam, would probably be all that is necessary to bring into market this immense quantity of copper. It may be that some process by fire might be advantageously used."

The lowest grade of ores in England and Germany, we believe, are chiefly worked by what is known as the "Linz Process"—first roasted and then treated with acids. Another process is also employed where the ores, after being crushed, are submitted directly to an acid process, without any roasting. Both of these processes are there found remunerative in ores as low as two per cent.

The refuse ores now at the mines in Calaveras, will yield an average of from 10 to 12 per cent., which is from 5 to 6 times as much as the lowest grade of ores worked in England. It is but fair to presume that such ores will not long be considered worthless in California.

The Action copper mine, in Canada, the ores from which are transported to Boston for treatment at a cost of \$6 per ton, yielded an average of only 12 per cent., yet the net profits on this mine for the months of July, August and September of 1862 were as follows:—

	Total Yield.	Total Cost.	Net Profit
July.....	\$16,682	\$6,500	\$10,182
August...	not given	not given	12,900
September	21,730	8,015	13,715

Net profits for three months.....\$36,745

This, it should be borne in mind, is the net profits of raising, transporting and selling the ore in Boston. No outlay is required for expensive reduction works, furnaces, &c. A profit of \$36,747 was realized from the above mine, in three months, from 12 per cent. ore, sold by assay as we are now selling Calaveras county ore in this market; and yet it is expected that with further improvements at the mine, a much larger percentage of profits will soon be realized.

With such facts as these before us we need have no fears lest the value of the Copper Mines hitherto opened in California should be overrated. That they will soon prove quite as productive of real wealth to the State as the mines of either gold or silver we will endeavor to show in our next issue.

## THE SHEBA MINE.

THE SHEBA MINE, as is well known, is the "Ophir" of the Humboldt District. It is situated at Star City, and is now opened and being worked in a thorough manner, under the supervision of Mr. Richard Powning, an experienced Lake Superior miner. We learn from a correspondent that two tunnels are now being run into the mine, one of which has already been driven a distance of 65 feet, and is 6 feet high and nine wide, thus offering ample room for the most extensive and economical working. About 150 tons of ore have already been taken out through this tunnel, ten tons of which were to have been crushed the past week, at the new mill just erected near the mine. We shall probably be apprised of the result of this crushing in a few days.

Only two shifts of two men each are now being worked; but a rise upon the course of the lead will soon be commenced, which will give employment to some 12 additional hands, as stoppers, who will be able to take out from 10 to 15 tons each twenty-four hours. The second tunnel has been commenced 100 feet below the first and is already in about 40 feet. Stoppers will soon be placed in this tunnel also. The mine is very favorably located for working, and will soon be able to give employment to fifty men, and turn out from 80 to 100 tons of ore each twenty-four hours. The prospects of this mine are certainly very flattering, and we trust the most sanguine hopes of the proprietors may be fully realized.

The same correspondent from whom we obtained the above particulars, informs us that Mr. Richard Homfray, late of Grass Valley, but now of Star City, has his mill nearly ready for starting.

AS IT SHOULD BE.—Senator Latham has telegraphed to a party in this city, that Government had determined to dispatch an armed convoy with each of the California treasure steamers hereafter, so that no fears of any future danger of capture and confiscation need be entertained by loyal treasure shippers. This intelligence came too late, however, to allay the excitement with regard to treasure shipments on the last steamer; and shippers, as a general thing, forwarded their treasure to England. If, as has been with some reason suspected, it has been the hope of English ship-owners, by means of their piratical "Alabama" to change the course of California's golden stream from New York to Liverpool, they have been for the time being, successful. But so soon as a government vessel shall be known to be in readiness to perform the assigned duty, the treasure will again assume its wonted channel, and the odium which the inglorious career of that "freebooter" has so justly attached to England, will have to be endured, with but the merest moiety of the paltry thirty pieces of silver for which she has sold her national honor.

Good brown paper is now manufactured at the Salisbury Paper Mills, in Orange county, from "cat tails," the product of the wild flag growing in low grounds all over the North.



## Our Mint, its Rules, Charges and Operations.

## For parting silver from gold when gold

is below 300-1000ths. fine. . . . . 3cts per oz.  
 " from 300-1000ths. to 750-1000ths fine. 7cts " "  
 " " 750-1000ths to 950-1000ths " 14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
 301 " 500, 7cts, " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coinage. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coinage, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

**MEETING OF THE LEGISLATURE.**—The State Legislature meets at Sacramento, to-morrow. It is to be earnestly hoped that the present body will profit by the experience of past Sessions, and so discharge the great trust committed to their care as to merit the approbation of their constituents, and materially advance the varied interests of the State. The election of a United States' Senator, and a suitable demonstration of the loyalty of our State and her earnest desire to do what she can to strengthen the arms of the general Government in its present terrible struggle with treason, are the two most important matters which will come before the present Session. The only further important duty of that body will be to devise ways and means to foster, encourage and stimulate the great industrial interests of our State. As the special advocate and representative of the great leading interests of mining and mechanics, we shall take especial pleasure in receiving from members orders to supply them with copies of the Press, during the Session, believing that they cannot fail, from time to time, to gather from our columns valuable and practical hints which may be of service to them in shaping such legislative action as may have a bearing upon the important interests which we represent. With earnest wishes that the session may be particularly valuable to the State and honorable and agreeable to themselves we wish them the heartiest complements of the season.

A COMPANY has been formed in Greece for the purpose of cutting a canal thirty-four yards wide and six deep across the Isthmus of Corinth, in order that the dangerous voyage along the coasts of the Peloponnesus may be rendered unnecessary. Such a canal was often contemplated, and was even begun, in ancient times, but it has never been formed.

**REPAIRING THE "MOSES TAYLOR."**—The opposition steamer *Moses Taylor* has been hauled into her berth at Mission St. wharf, and repairs upon her engines are being rapidly pushed forward. A new foremast will be placed in her, and the rigging, spars, etc., are to receive a general overhauling. The *Taylor* will be ready to start for Panama on the 21st of January.

**EFFECT OF MUSIC ON THE SICK.**—The effect of music on the sick has been scarcely at all noticed. In fact, its expensiveness, as it is now, makes any general application of it out of the question. I will only remark here that wind instruments, including the human voice, and stringed instruments capable of continuous sound, have generally a beneficial effect.—while the piano-forte, with such instruments as have no continuity of sound, has just the reverse. The finest piano-forte playing will damage the sick, while an air "Home, Sweet Home," on the most ordinary grinding organ, will sensibly soothe them, and this quite independent of association.—*Florence Nightengale.*

## Mining Stock Report.

REPORT OF SALES  
At the San Francisco Mining Stock Board,  
For the week ending December 27, 1862.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Ophir - - -	16,800	12	\$300						2000
Gould & Curry -	4,800	4	500	2,500	2,500			2,700	
Central - - -	1,800	12	300						
California - - -	3,600	12	300						
Chollar - - -	3,600	*	250	360	355	355		380	365
Potosi - - -	4,400	1	400	95	90	110		80	105
Hale & Norcross -	8,000	2	500	430	430	420		480	
Sierra Nevada - -	5,600	4	300	72½	60	60		62½	64
Dancy - - -	2,800	2	500						
Burning Moscow -	4,800	2	100	54	57½	61		61	61
North Potosi - - -	3,000	1	300		5	4			
Rogers, F. D. - - -	2,000	1	250			8		11	
Meredith - - -	7,200	2	125		23	20			
Charles Caney - - -	1,800	1	30			12			17½
Sacramento - - -	1,800	1	300						
Lacerna - - -	10,000	1	500			4½			
Lady Bryan - - -	6,000	1	100						
Savage - - -				710	700	650		610	700
Cedar Hill Tunnel -					1½				
Mount Davidson -	10,000	3	200					4½	
Wide West - - -	8,600	4	60	220	260	265			290
Antelope - - -	1,200	1	500		80	70			80
Esmeralda - - -	1,600	1	1000						
Real Del Monte - -	4,400	1	400	16	18	17			18½
Atina - - -	1,200	1	100	3½	4	4		4	
Utah - - -						18½			
Silver Hill - - -					16	15			16½

\* 1 share to 10 inches.

§ New Stock.

SAN FRANCISCO, Jan. 5th, 1863.

## STOCK REMARKS.

The Mining Stock Market has not been particularly active during the past week.

Ophir opened at \$2,300 and closed at \$2000. The depreciation has been caused in part by the report that the mine presents a less favorable appearance than for some months previous, and to some extent by the prospect of light dividends for some months to come, in consequence of the payments to be made to the Virginia Company, and from other causes, all of a temporary nature. The Directors will meet to-morrow to declare a monthly dividend.

Gould & Curry commenced the week at a decline of \$50, but closed firm at old rates \$2,700. The tendency of this stock is to advance. Much speculation is indulged in with regard to future dividends. January dividends have been sold as high as \$75 and \$80 per foot. Ten stamps and four amalgamators have been started in the Company's mill, which work satisfactorily. The first bar from the mill was shipped for this city on the 31st ult. It was valued at \$1000. The entire 40 stamps, with the complement of amalgamators will be put in operation during the present week. The results of their work will soon determine the actual value of the stock.

Chollar is still in demand at from \$350 to \$365. Shares are in demand at \$360, and there is not sufficient stock offered to supply the calls.

Potosi.—The decision of the Supreme Court in the case of the Chollar vs. Potosi will probably be rendered to-morrow. For some reason or other the impression seems to prevail that it will be favorable to the latter; hence the advance of its stock the past week from \$90 to \$110. Five shares are quoted by Bates & Williams at \$120 per foot.

Savage is in demand at \$600. Very little stock is offered. The annual meeting of stockholders for the election of Trustees will be held on the 13th inst. (See item in 2nd column, 2nd page, in reference to this Company.)

Sierra Nevada has somewhat declined from last week, but is in demand at previous quotations. There appears to be a desire for speculation in this stock, which will probably run it up to higher figures the coming week.

Burning Moscow is in demand at slightly advanced rates. It has been quoted the past week as high as \$62½.

Mount Davidson is still quoted at old rates.

Charles Caney in demand at \$17—dull at its highest quotations, \$20

Meredith exhibits a slight decline, but has many friends.

Iowa is quoted from \$130 to \$140. In demand at \$135.

Wide West (New Stock—consolidation with Johnson Co.) is quoted at from \$265 to \$290. At the close of the week, quite firm at \$285. But few transactions reported.

## TRANSACTIONS IN SHARES. \*

Ophir—60 shares at \$2,300 per foot; 68 at \$2,200; 84 at \$2,100; 78 at \$2,000; 24 at \$2,200; 36 at \$2,100; and 60 at \$2,100.

Gould & Curry—40 at \$2,650; 16 at \$2,700; 20 at \$2,700.

Chollar—20 at \$365; 20 at \$360; 40 at \$365.

Savage—10 shares at \$700.

Potosi—10 shares at \$95; 40 at \$100; 20 at \$110; 5 at \$130.

Sierra Nevada—10 at \$62½; 10 at \$72½; 15 at \$60; 35 at \$62; 5 at \$62½

10 at \$65. Sanborn & Co. report 174 at from 62½ to 65

Burning Moscow—10 at \$59; 10 at \$61. Sanborn & Co. report 113 at from 60 to \$62½.

Mount Davidson—350 shares changed hands at from 4½ to 5 dollars.

Charles Caney—10 at \$20; 5 at \$20; 40 at \$21.

Meredith—105 shares are reported at from 20 to 22 dollars.

Wide West—20 shares at \$280; 9 at \$290.

Rogers, F. D.—10 shares at \$17.

Union—(Russ District), 100 shares at \$24.

Burnside—10 shares at \$20. Real del Monte—5 shares at \$13.

\* Quotations made at given rates per foot.

## Coso Stocks.

The Josephine has been but little inquired for the past week. It changed hands at the Stock Board from 10 to 13 dollars.—Holders asking \$17 to \$20  
 Coso—Not quoted, \$25 asked.

Willow Springs—held at \$45. Sold at \$10.

## Mexican Mines.

Mina Prieta finds no recent buyers, but is held at \$130.  
 Dios Padre is quoted at from 29 to 36 dollars..

## WASHOE STOCK REPORT.

[Compiled from the Daily Territorial Enterprise.]

Advice from the Virginia City Stock Market, since our last issue report but little business, more from lack of sellers than buyers. The stimulus of action and pressure of holiday demands have brought some good stock into the market at fair rates. At latest accounts the market was very firm. Nearly all the Stocks of admitted value are advancing. The Enterprise asserts its knowledge there is "a positive demand from capitalists for ground in twelve or fifteen companies in Virginia district alone, but so carefully are operations conducted that the stocks in request are scarcely suspected. In due time the veil of secrecy will be withdrawn, when the stocks so quietly dealt in, will, of course advance. We do not deem it advisable to be more explicit at present."

The Enterprise speaks as follows of the effect of its pet Incorporation Scheme on the Stock Market—

"Thus far, the effects of the Territorial Incorporation Act point to nothing like disaster. Contrary to the predictions of California crows, orders from San Francisco continue to pour in upon our dealers, and confidence in the safety of investment here is manifestly strengthened by the Act. Hence the irrefragable inference, that the gloomy prophecies of certain parties here, as well as in San Francisco, are simply a concerted system of "bearing," of which advantage will be taken in due time. Timid holders will do well to make a note of this fact."

**WINTER WORK.**—The work of prospecting appears to be going on with as much energy as at any time during the Summer. Most companies have so well prepared for Winter, that a light snow storm does not inconvenience them in their operations. Many developments are being made in various claims in this and Gold Hill districts, which cannot fail to attract the attention of capitalists and induce investment.

What bids fair to prove an important discovery has been made just to the West of Gold Hill, by the Dunn Company. The indications promise a rich silver lead, and differ materially from anything heretofore found in that district. Five dollars per foot is offered for ground.

It was reported on the 24th ult. that a very fine quality of ore had been struck in the El Dorado, resembling the Ophir, etc., but we do not see any advance in its quotations, \$60, with \$70 asked. It is claimed that the ledge is now 44 feet thick, with a paying vein of 12 feet.

There are also reports of rich gold bearing rock being struck to the north of Cedar Hill, at a locality through which it is thought the Ophir lead passes.

The Utah company is also rejoicing over a new development, the character of which is not announced. It is quoted at \$45—a material advance.

There is less disposition manifested to purchase claims in litigation than was apparent last Summer. As a consequence, Moscow is dealt in sparingly, while Madison, Geller and La Crosse are a drag in the market, they being offered respectively at \$25, \$38, and \$15.

The Enterprise of the 24th ult. says that the Potosi could not then be purchased in Virginia City for less than \$100. It was quoted at the San Francisco Stock Board on Wednesday last at \$110, an advance of \$20 on previous quotations.

Norton stock remains quiet; none offered in the market. Several tons of rock from the mine in front of the Company's office, will compare favorably with the best ore ever taken from Cedar Hill.

The Yellow Jacket Company are having rock from their mine crushed with fine results.

The Union Company, Gold Hill, are having a small quantity of rock from their mine practically tested by crushing at a mill, which will tell something of its value.

Ashland is offered for \$10 per foot, a small lot changed hands at these figures.

Ten feet Hazel Green sold at \$4 50 per foot.

Oriental is offered for \$4, without sale.

Nevada, which has been in demand for sometime at low figures, is with-

out sale. The stock is offered at \$6 per foot.

Five dollars per foot is offered for North American.

Baltic is offered at \$20 per foot.

Ten feet in the Bloomingdale changed hands at \$4 50; Zouave is offered at \$9 00.

Birdsall is quoted at \$17; La Crosse, \$18; Sacramento, \$35 to \$40; Baltic, \$20; Sierra Nevada, \$60; U. S. Tunnel, \$0,000 per share; Cedar Hill Tunnel, \$4.

## HUMBOLDT STOCK.

Considerable Humboldt stock continues in market, but aside from the Mars, Cuba, Sheba, South Extension of the Sheba, and three or four other claims, there is little or no inquiry in that direction. There is also a large quantity of Eagle and Silver Mountain district stock, but entirely without buyers.

The following stocks, not enumerated above, are in the market in Virginia City, and held at the figures annexed:—

Santa Fe - - - - -	\$25 00	Summit - - - - -	\$5 00
Empire - - - - -	5 00	Washington Leds - - - - -	6 00
McBee - - - - -	25 00	Milton - - - - -	20 00
Belvidere - - - - -	15 00	Laboring - - - - -	15 00
Poytona - - - - -	25 00	Sweezy - - - - -	25 00
Durgan - - - - -	4 50	Caledonia - - - - -	8 00
El Dorado - - - - -	70 00	St. George - - - - -	4 00

The Australian gold fields differ much in character from ours, being mostly in deep diggings, where the hydraulic hose and sluice cannot be used to advantage, or where at least they are not employed so extensively as in this State. They were very rich at first, and for a time they turned out a stream of gold more abundant than that which flowed from the claims of California.



## GIFTS, DONATIONS AND SUBSCRIPTIONS

To the work entitled "THE METALLIC AND AGRICULTURAL WEALTH OF THE PACIFIC STATES." The publisher desires to thank the several gentlemen whose names are hereto appended, for their magnanimity and aid in behalf of this important work.

Samuel Brannan, Esq., Citizen.  
John Parrot, Esq., Banker.  
Hyam Joseph, Esq., Citizen.  
Ira P. Rankin, Esq., Collector of Customs.  
S. H. Parker, Esq., California Postal Agent.  
S. C. Bradshaw, Esq., Pacific Metallurgical Works.  
David Henriques, of the Board of Stock Brokers.  
Rev. Dr. E. Cohn.  
Rev. Dr. H. M. Bien.  
J. M. Mugarietta, Mexican Consul.  
H. Meyers, Citizen.  
Henry M. Hale, City and County Auditor.  
Dr. J. C. Tucker, of Steamers Moses Taylor.  
Dr. J. W. Van Zandt.  
James Hitchens, Supt of Willow Spring Mine.  
G. F. Deetken, Supt Metallurgical Works.  
E. Torres, Ex-Mexican Minister.  
M. Lebatard, Merchant. San Francisco.  
Greenberg & Mandel, "  
A. B. Stanford & Co., "  
J. Seligman & Co., "  
B. Hamburger, "  
Levy Strauss, "  
M. & J. Steinhart, "  
L. King, "  
S. Rosenblatt, "  
Herman Gerstung, "  
Henry Newstadter, "  
Uhlfelder & Cahn, "  
Wm. Meyer & Co., "  
Hecht Bro. & Co., "  
H. Cohn & Co., "  
Scholle Bro's, "  
I. Bluxome, Jr., "  
Lazard Freres, "  
Chas. A. Crane, Esq., "  
E. H. Washburn, Tax Collector, San Francisco.  
Jas W. Bingham, Clerk Board Supervisors, S. F.  
C. Bartlett, Clerk Probate Court, S. F.  
M. C. Blake, County Judge.  
Rev. Thos Starr King,  
Dr. L. O. Lane, M. A. Prof. Pac. University.  
John Levy of Braverman & Levy, Importers.  
Dr. J. B. Beers, Dentist,  
William Fell, Esq., of Nevada Territory,  
H. F. Teschemaker Esq., Mayor of San Francisco.  
Gen. R. M. Drum, Insp. Dep. of Pacific.  
R. B. Woodward, Proprietor of What Cheer House,  
Dr. S. W. Kellogg, of Kellogg, Hewston & Co.  
A. H. Houston, Contractor,  
Alsop & Co. Bankers,  
St Losky, Levy & Co., Tobacconists,  
Macondry & Co, Commission Merchants,  
Thos N. Cazneau, Com. of Emigration,  
H. B. Platt of Platt's Music Hall,  
John J. Hucks, Manufacturer,  
Thos Baugh, Prop. Merchant's Exchange.  
E. Dupres, Broker, San Francisco,  
William Schmolz, Coiner, U. S. B. Mint,  
Robert J. Stevens, Supt. U. S. Branch Mint,  
Conrad Weigand, Assayer  
Henry Baker, Cashier, "  
W. B. Gould, Weight Clerk, "  
Ogden Hoffman, U. S. District Judge,  
Wm. H. Sharp, U. S. District Attorney,  
Wm. H. Chevers, "  
Harvey S. Brown, Attorney and Counsellor.  
F. A. Fabens, Esq. Attorney.  
T. W. Park, Esq., "  
Byrne & Freelon, Attorneys & Counsellors,  
Harvey S. Brown, "  
Gregory Yale, "  
P. W. Shephard, Ass; Dist. Atty.  
T. Dame Pres S. F. and S. J. R. Road Comp.  
W. Hayes of Stanley & H.  
A. Kohler  
John E. Kincaid Contr.,  
W. W. Dunn Machinist  
W. L. Booker H. B. M. Consul  
Ant. Forrest H. I. M. V. Consul of France  
H. Behr Dr. Consul Saxe-Anhalt  
Steinhart Bro.,  
Greenhood & Newbauer  
E. L. Goldstein  
S. W. Moore  
H. W. Wadsworth  
W. B. Cooke  
Leut Sherwood & Co.  
Stein Simon & Co.,  
F. W. Bayerque  
And. J. Moulter Supt. Publ. School Cal.  
Dr. Isaac Rowell Prof. Chem., etc., P. M. Univ

Leander Ransom, State Locating Agent.  
Chas. A. C. Duisenberg, Consul of Bremen.  
Chas. W. Rand, U. S. Marshall.  
William V. Wells, Consul of Guatemala.  
M. Klinkofstrom, Vice Consul, Russia.  
C. Fischer, Consul of Austria.  
Louis Sloss & Co., Brokers.  
A. W. Von Schmidt, S. V. W. W.  
Reynolds, Reis, & Co, Bankers.  
R. Beverly Cole, Prof. Obst. P. M. Univ.  
Alfred Borel, Merchant.  
S. Simon, "  
Heynemann & Co., "  
Rosenstock & Price, "  
Henry Voorman, "  
H. Levy & Co., "  
Wm. T. Coleman & Co.

We would call the attention of our readers to the Stock Report which we give from week to week in the columns of the Press. This report is very full and carefully made up from the most authentic sources, embracing all attainable transactions both in this city and in Washoe. Our report for this city, embraces a full statement of the sales at the Stock Board—each day's operations being presented in a tabular form. We also re-produce the substance of the several Mining Circulars issued in this city. In order to give each week's transactions, full and complete, we have changed our publication day from Saturday to Monday. We intend to make each number of the Press a full epitome of the mining intelligence of the previous week, and add thereto such matters of general interest and information as shall be thought useful and advantageous to the miner, and the mechanic.

## Important Publication.

We have been favored, by the publisher, with the title page and prospectus of the quarto work entitled, "The Metallic and Agricultural Wealth of the Pacific States." The editor of this work has recently disposed of the "Mining and Scientific Press," with the view of devoting his entire attention to the publication of the work; to this end he is making arrangements for an early visit to the Atlantic States and Europe. The work if carried out according to the prospectus, will be one of the most valuable publications yet presented to the public, and will prove of incalculable benefit to California and the Pacific Coast generally, in bringing the immense mineral wealth of this region more prominently before the Capitalists of Europe. The object is a laudable one and ought to be encouraged. Mr. Silversmith is one of our oldest citizens and is well acquainted with the subjects of which he treats. He desires but little aid and that we trust he will readily obtain. The following is the prospectus:

## PROSPECTUS TO THE PEOPLE OF THE STATES OF CALIFORNIA, OREGON, AND ADJACENT TERRITORIES.

The Subscriber, one of your earliest citizens of California, and for the most of his time engaged as a journalist, and particularly of late in a journal devoted to the chief resources of the Pacific States, respectfully submits the following plan and proposition for the purpose of bringing hitherto England, France and Germany the working classes, mechanics, artisans, miners, and metallurgists for the purpose of developing the resources of our thinly populated States and Territories, thereby reducing labor, the establishing of factories, the occupation of the millions of acres of arable land now lying dormant, and to work our mines. The benefits accruing to our Government—to marine conveyances—the merchant—the manufacturer, the mining companies and professional companies, cannot but be beneficial, providing the facilities are offered to such emigrants, and according to the tenor of our laws governing such. For these purposes the subscriber desires to seek only the necessary or pecuniary aid to take him across the Pacific and Atlantic, so that he may be enabled to lay before the people of Europe a work which he has compiled from authentic sources, comprising the mineral wealth of the Pacific States, including partly Mexico, Lower California, British Columbia, etc., together with a synopsis of the climatology, agriculture, arts and manufactures, with interesting statistics of our imports exports, and population. Also, the organic acts of our State, the local and general laws governing mining, the Free-emption Act, and kindred subjects pertaining to the Pacific States. The author reserving for himself the right of translation of this work (which has cost him three years of his time to collect and compile) in the German and French languages.

He contemplates making the tour to the Atlantic States and Europe in February or March, 1863, and will equip himself with the mineral materials, fossil remains, etc., and illustrate them by diagrams and discourses throughout the Atlantic States and Europe.

Such a work which your petitioner has in view cannot be published in this State without an extraordinary outlay, nor have we the materials, artists or skill in copperplate or wood engraving. The work will comprise from 400 to 500 pages, to be handsomely illustrated with colored plates, maps, etc., quarto form. The subscriber will add thereto a complete list of all the associations and companies, especially mining companies.

He goes to Europe for the purpose of seeing all the manufacturing places, machines and utensils; also to the leading mining districts and metallurgical establishments, to acquire from the best sources there the best mode of treating our rich minerals, and lay these several important features before our people through the Mining and Scientific Press, and the work be hereby offers. But the most important subject in his mission is the inducements he will offer to Europeans of our immensely rich mining fields and agricultural lands, together with the great advantages offered by a liberal and protective government for industrious citizens.

The subscriber, therefore, calls upon the citizens in the Pacific States who have the interests of our new States nearest their heart, to aid him in this grand but laudable undertaking with means. Each subscriber will be furnished with a copy of this work, which is designed to be useful in the counting house, to the professional man and miner. The author desires to state that whatever aid or subscription he may be furnished with by the people of this State he will refund after the publication of the work, or leave the amount to be taken out in books.

Respectfully submitted,

JULIUS SILVERSMITH.

RECENT PATENTS—Granted to CALIFORNIA INVENTORS through the Pacific Patent Agency, J. SILVERSMITH, Solicitor:

HERMAN CAMP,—Patent for Quartz Crusher and Amalgamator.

W. H. RICHARDSON—Patent granted for Washing Machine.

E. E. MATTESON, Nevada: Hydraulic Derrick. This invention has been illustrated in this journal, and has obtained great celebrity throughout the State.

ELANDER HEATH, San Francisco, Spiral Spice and Sage Mill. See "Mining and Scientific Press," June 9th, 1862, Vol. V., No. XIII.

G. F. DEETKEN, formerly of Nevada: Apparatus for separating Gold from Pyrites. This is one of the most useful inventions of the day. Mr. Deetken has successfully worked sulphurets for a number of years in Nevada county, professes to have obtained greater results than others engaged in the same occupation. Mr. D has recently established himself in this County, on the San Bruno Road, near the Islais Creek, where he has erected chemical and metallurgical works.

## Routes and Fares from San Francisco to Foreign and Domestic cities.

Pacific Mail Steamship Company—Steamers leave for New York via Panama, on the 1st, 11th and 21st of each month. 1st cabin, \$250; 2d cabin, \$200; 3d cabin or steerage, \$100.

Nicaragua Steamship line, Ross, Dempster & Co., agents. —Steamers leave for New York via isthmus of Nicaragua, on the 21st October, and semi-monthly thereafter. Price of fare not yet stated.

To Portland, Victoria, &c., \$60. Crescent City, Trinidad, &c., \$20 \$30. San Diego, Monterey, and Los Angeles, \$20 to \$30. Sandwich Islands, per sailing vessels, \$100 to \$150. Australia, sailing vessels, 1st class, \$250 to \$300, China and Japan, sailing vessels, 1st class, \$200 to \$250. Mexico, \$30 to \$50.

California Steam Navigation Company dispatch steamers daily to—Sacramento, \$5; Stockton, \$4; Petaluma, \$3.

Overland Mail Company—Stages leave daily for St. Louis via Salt Lake; fare, \$200.

## THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, DR PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 1 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hackneyed course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death and always more tedious than the disease. Patients a daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone." I was bled and blistered, then cupped two or three times week—had a blue pill prescribed for me at night, and sal in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise with fifty other inconsistencies, the aggregate of which sure blindness. Patients should be careful and not pla their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. I PARDEE has from sixty to one hundred patients under daily supervision, and, with but very few cases, they have been treated by other physicians before applying to him—all to no benefit. Those who are doubtful are permitted call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movement of the real eye, and that they look so life-like that no one could tell them, when properly inserted, from the real eye. The eyes are sold reasonable.

All the operations performed, such as "Strabismus," cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Pl Hotel—old No. 217, up stairs.

aug 14



PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA  
connecting via the Panama Railroad with the steamers of the Atlantic  
and Pacific Steamship Company, at Aspinwall.

FOR PANAMA,

The following Steamships will be dispatched in the month of January, 1863.

Jan. 10th—St. LOUIS, Captain E. S. Farnsworth,

21st—GOLDEN AGE, W. H. Hudson, Commander.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York

For freight or passage, apply to

A. B. FORBES, Agent.

jet

Corner of Sacramento and Leidesdorff sts.

## OPPOSITION

People's Line to New York.

ROUTE CHANGED FROM NICARAGUA TO  
ISTHUS OF PANAMA.

Through in Twenty-one Days!!!

FIVE DAYS AHEAD OF THE MAIL.

The fast and favorite Double Engine Steamship

MOSES TAYLOR,

E. HOWES, Commander.

Will be dispatched for

PANAMA,

From Mission street Wharf.

Punctually at 4 o'clock P. M., of

WEDNESDAY, - - - - - JANUARY 21, 1863.

Connecting at Aspinwall by the Panama Railroad,  
and thence by the Splendid Steamship

AMERICA,

2,000 Tons. - - - - - JEFF. MAURY, Commander.

The America has proved herself the swiftest Steamship afloat, and in comfort,  
cleanliness and regulation is incomparably superior to any other running  
to Aspinwall.

The Moses Taylor is known to be the fleetest ship on the Pacific, and passengers  
may confidently anticipate making the month trip in 22 days, as  
obstructions which are said to have been thrown in the way of passengers,  
by the Nicaragua Government, cannot possibly occur on this route.

THE PEOPLE'S LINE

Has been established to meet the universal demand for an

OPPOSITION,

And every Californian should give it a preference for the public good, as  
well as his own private advantage, which will be secured by

Reduced Fare, Good Accommodations, and Quick  
Trips.

This line is intended to be a permanent one, and is not put on for the purpose  
of being bought or driven off. Speed, safety and the utmost comfort of pas-  
sengers are the main objects. To secure these no merchandise freight (other  
than specie) will be taken. The MOSES TAYLOR is built with Water-  
Tight Compartments, and is unequalled for safety as well as speed.  
For information or passage apply to

I. K. ROBERTS, Agents,  
425 and 427 Battery street.

## REMOVAL.

OFFICE OF THE PACIFIC METALLURGICAL WORKS  
is removed to 318 California street. Having enlarged our Works at  
North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or  
Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings  
reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments.

S. C. BRADSHAW, Agent,  
318 California street, near Sansome, up stairs.

## LABOR-SAVING

Rock Drilling Machines.

TWO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRY-  
men. The subscriber, Patentee and Agent for GARDNER'S PATENTS,  
will continue to receive orders for

HAND, HORSE, AND

STEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Galle-  
ries, etc., one man performing the labor of three in the ordinary way.  
A FOUR-HORSE POWER MACHINE, operated by one man, drives a ma-  
chine capable of drilling a four to six inch diameter hole in granite four feet  
deep, and in hard limestone, six feet per hour—the rapidity of the work  
being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the  
machine, and its entire success in reducing the cost of drilling holes to one-  
tenth of the former expense, and on a rock excavation of any extent, from  
fifty to seventy-five per cent. on the entire work. Responsible parties who  
have rock excavations to make in any part of the State, the subscriber will  
undertake and guarantee to perform the work required, at a saving of at  
least twenty-five per cent. over any other process.

WM. W. DUNN,  
oct-3m] Fremont street, bet. Market and Mission, San Francisco.

H. HOFER, Coffee and Dining Saloon, and Bakery No. 163 Clay street  
bet. Montgomery and Kearny. m1

C. W. THOMAS, Plaining Mill, California street, facing the Mission R. R.  
Depot, San Francisco. m1d

## A. ROMAN & CO.

WHOLESALE AND RETAIL

## BOOK ESTABLISHMENT.

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular  
Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.  
Manual of Metallurgy, more particularly of the precious metals; but includ-  
ing such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of  
the Mine Agent and Smelter. By James Phillips and John Darlington.

Pigot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Phillips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell.

Liver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weisbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Prescott's Chemical Analysis.

Together with many other works in this & similar lines

Books imported to order on short notice.

## A. ROMAN & CO.,

417 & 419 Montgomery Street.

## Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS, OR  
manufacturers of Horticultural Implements, are referred to the above  
invention. For description and engraving see MINING AND SCIENTIFIC PRESS  
No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentes.)  
sept-3m] San Francisco.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache  
bekannt sind, können ihre Mittheilungen in der deutschen  
Sprache machen

Stizzen von Erfindungen mit kurzen, deutlich geschriebenen  
Beschreibungen beliebe man zu adressiren an.

JUL. SILVERSMITH, Federal Building, Room 23.

## RASCHE & SONS,

131 Montgomery street, bet. Bush and Sutter,  
SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

## PIANOS, SHEET MUSIC

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;

T. GILBERT, Boston;

C. MEYER, Philadelphia.

Whose Pianos they have always on hand, for sale and to rent.

## PIANOS FOR RENT.

New Music received by every steamer. New Music pub-  
lished. Music assorted and bound in the best style. A lib-  
eral discount made to the trade and professors of music.

au14

## WRIGHT'S PICKS.



JOHN WRIGHT, of Sacramento, has established himself in San Francisco  
for the manufacture of every description of PICKS, of the best material,  
at reduced prices. Pick Axes of the best iron furnished in any quantity, at  
low rates. Orders from the country promptly attended to. N. B.—None  
genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers  
of Wines and Liquors, S. E. cor. Front and Sacramento sts. m1

D. R. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth  
performed in the most skillful and approved manner. ap18

KELLY & WADE, Importers and Dealers in Paints, Oils, Turpentine, Etc  
Nos. 105 & 107 California street, bet. Davis and Front. m18

Dr. Van Zandt,  
Consulting Physician and Surgeon,

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practi-  
cal Medicine.

The Mysterious Problem of Material Nature, Electricity!  
Made Subservient for the Cure of all Nervous  
and Spinal Diseases.

THAT THIS PRINCIPLE, successfully applied to diseased states  
of the system, is to prove the great sought-for necessity, long wanting  
by physicians, to aid their medicines in overcoming organic and functional  
derangements of the human body. It is a part of the great principle of vi-  
tality known as nervous influence and necessarily must have much to do in  
obviating diseased action.

### Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equi-  
librium of the ELECTRIC principle; and should this secret and hidden equi-  
poise of health be broken or lowered—should the body be negatively elec-  
trified when it should be positively charged—is not the current broken, and  
is there not a war of forces going on in our system? This needs correcting  
and in order that the tissues of the body should be susceptible to remedia-  
agents we must first restore and

### Awaken the Magnetic Life Within Us,

The spinal and sympathetic nerve systems. Believing as I do most firmly  
in this great magnetic or electrical intensity of the earth, with its influences  
upon our bodies in health and disease, I am led to take advantage of the  
press, through which to awaken attention to the subject, that good may  
come to all.

### No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life  
blood, render the stomach, liver, heart, kidney and all the natural func-  
tions active by ELECTRICAL excitation, and at once the aged, the palsied,  
the nervous, the debilitated, the melancholic, the dyspeptic and the invalid  
revive under its benign influence.

### To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and  
office practice, is owing to his correct views of the origin of all their mal-  
adies. Ladies can consult him with entire confidence, as he is no speculator  
upon human ills—but is proving himself the only member of the legitimate  
profession in California who is really successful in removing those ills which  
are the peculiar province of the sex. His high appreciation of their deli-  
cately attuned nervous organism, together with their great sympathetic  
life, renders him doubly able to assuage those silent complaints which  
they bear so patiently and so long. No social disgraces need longer af-  
fect our home circles; for he can arouse the stricken energies; restore the  
wonted tonicity of the body; awaken the melancholic and desponding; ar-  
rest those drains which cause so much anxiety; cure those protean mal-  
adies which have so long

### Buffed the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at  
the stomach, wandering pains, wasting away of strength; extreme debility  
and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that  
general depression of life's powers, which go to render her life a misery  
and death a boon. Dr. Van Zandt, with his new method of exciting the  
Electro-Galvanic current, together with his remedial measures which are  
adapted to the necessities of California, will assure you of a complete and  
radical recovery of all bodily and mental infirmities, and will restore you  
to usefulness; and spare you a blessing to your family and to society.

### All the World Over

wherever disease exists, whether special to the soil and climate or com-  
mon to all regions—epidemic or casual, acute or chronic, contagious or non-  
contagious—it is as necessary to restore the ELECTRO-GALVANIC equilibri-  
um, especially in California, as it is to give food to the starving. This state-  
ment is based upon a series of facts extending through many years, and  
verified by hundreds of patients; so that no principle of science, no rule of  
experience, no result of any well known cause, rests upon more sure and  
unshakable foundations, than those which underlie the world-wide reputa-  
tion of Electricity for the cure of all nervous states of the body, faulty di-  
gestion, mental and physical debility or prostration, coughs, asthma, wan-  
dering pains of a rheumatic, gouty or mercurial character, and all forms of  
disease, the result of scrofula or coarctate habit of body.

### None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—  
melancholy which you cannot shake off—loss of power which you cannot re-  
gain—depression of spirits which weigh you down—wastefulness that knows  
no sleeping—business that languishes for want of energy—a void which no  
society can fill—suspicion which no assurance can allay—Go to Dr. Van  
Zandt, for his great success, and the safety with which he administers his  
new method of Electrical excitation, together with his remedies, which are  
adapted to the requirements of climate and constitution, will assure you of a  
radical removal of all bodily and mental infirmities, within the scope of  
science and man to remove.

### The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt  
has made these afflictions an especial study, and that he is the only Sur-  
geon on our State, who has a diploma for that branch of practice. Very  
many of the eye and ear troubles are purely deranged nervous actions, and  
are cured by his electro-galvanic battery—as amaurosis, squinting, cataract,  
floating specks before vision, twitching of the eyelids, nervous deafness,  
roaring and buzzing noises in the ears, giddiness, etc. All operations suc-  
cessfully done at the delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov-29—3m

FREDERICK KESMODEL,  
Cutler and Surgical Instrument Maker

817 KEARNY STREET,

Between Jackson and Washington streets,

SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September,  
1854, also in 1861 for California and California Cutlery.

The attention of those afflicted with HERNIA or Rupture, or any one in-  
terested, is called to his new method of fitting and adapting Trusses to the  
different cases. It is a well known fact that there has as yet been no system  
of fitting Trusses. There are many different styles which have proven good  
in many cases, but they are all uncertain and cannot be relied on, and in  
severe cases are altogether useless. The following are some of the advan-  
tages I claim for these Trusses above any and all others: First—The Pad is  
formed on the parts to be decompressed by taking a plaster cast. Second—  
Having a correct model, it enables me to make the Pad of any desirable  
material, such as horn, ivory, etc. Third—The Pad is so adjusted to the  
spring that no movement of the body will move or displace it. There are  
many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL,  
Inventor and Patentee.

ap8 1f



## 50 lbs. MARINE AND Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

### 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

### DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead, mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. Fouque, Superintendent.  
WORKS, North Beach; Office, 318 California st., San Francisco.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and divided out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest.

The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,

No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office.

no 13 6mo

## V. SQUARZA'S Punch Factory.

MR. SQUARZA IS FAVORABLY known in this State for his Anti-Divorce Liquors and similar productions, as manufactured by him. We may mention that Mr. Squarza is an fait in the chemico-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,
Cognac do.	Whisky do.
Arac do.	Kirschwasser do.
Anti-Divorce Punch,	Cocoa do.
Coffee do.	
Tea do.	Morning Comfort,
Pineapple do.	Kuemmel,
Anisette,	Brandy Cocktail,
Kirschwasser,	Anti-Dyspepsia Bitters,
Appetiser,	Ladies' Tears.

And CHAMPAGNES of all brands.

### WASHOE

## Stock Exchange,

N. E. cor. Montgomery & Merchant sts.,  
SAN FRANCISCO.

### L. W. NEWELL & CO.,

Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.

### PHILADELPHIA BREWERY,

Second St. corner of Folsom, SAN FRANCISCO

Heischel, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

Nov 9

## FULTON FOUNDRY & IRON WORKS.

### HINCKLEY & CO.,

MANUFACTURERS OF STEAM ENGINES,

Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings, Mining Pumps, and all kinds of Machinery Amalgamators, Etc.

Nos. 47 & 49 First Street,

Between Market and Mission, San Francisco.

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to iron when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.

D. B. Hinckley, Wm. E. Worth. Wm. A. Field.

## DONAHUE'S

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST MILL MACHINERY, Boilers, Quartz Stampers, Amalgamators, etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.

PETER DONAHUE.

## LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

### PALMER, HANSCOMB & CO.,

## GOLDEN STATE FOUNDRY

AND MACHINE WORKS.

First Street, near Market, San Francisco.

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications. Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast. San Francisco, November 29, 1862.

3m

### GREAT REDUCTION

IN PRICES.

## STANFORD BROTHERS,

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

## Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

apl6f

## Holiday Presents!

IN

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

BRAVERMAN & LEVY'S,

621 Washington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. ALSO,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY,

No. 621 Washington Street, Facing Maguire's Opera House.

Dec 29 1m

## LEANDER RANSOM,

Civil Engineer

AND

## SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

## STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets.

oct-3m

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,

Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

### READ THIS!

COAL OIL EXPLOSION—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

### THEN THIS!

Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

## For Sale Cheap!

A HORIZONTAL STEAM ENGINE OF 4-Horse Power, Flue Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,

Federal Building, cor. Battery and Washington Sts. Room, No. 23.

## W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."

F. G. BEPLER,

## Practical Coppersmith

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery, SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work. All orders from the country promptly attended to.

## DEETKEN'S

Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek, SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov8-3m

## SQUARZA'S PUNCH.

HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff St., near Sacramento. Branch at 408 Montgomery street. my30

## JULIUS SILVERSMITH,

Commissioner for Nevada Territory,

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets, Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

JAMES PHELAN,

(LATE J. & M. PHELAN.)

IMPORTER AND JOBBER,

Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets, SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited. TERMS LIBERAL. Jan. 1-tf.

THEODOR KALLENBERG,

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and the Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. No. 4 Sansome street, corner Market, aul7-3m) San Francisco.

## DEVOE & COS.'

STEAM ENGINE

—AND—

MACHINE WORKS,

Corner Market & Fremont streets,

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILLS, Irons, Flour Mills, Quartz Mills etc., etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT CUTTING. AGRICULTURAL MACHINERY made and repaired. Duplicate parts of Threshing and Reaping Machines and Threshing Teeth made to order, on the most reasonable terms. Steam Engines and Boilers constantly on hand, and for sale cheap. Screw-Cutting and Turning Lathes for sale. DEVOE & CO.



# Mining and Scientific Press.

A JOURNAL OF MINING AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI. SAN FRANCISCO, MONDAY, JANUARY 12, 1863. NO. 11.

## An Important Mining Case Settled.

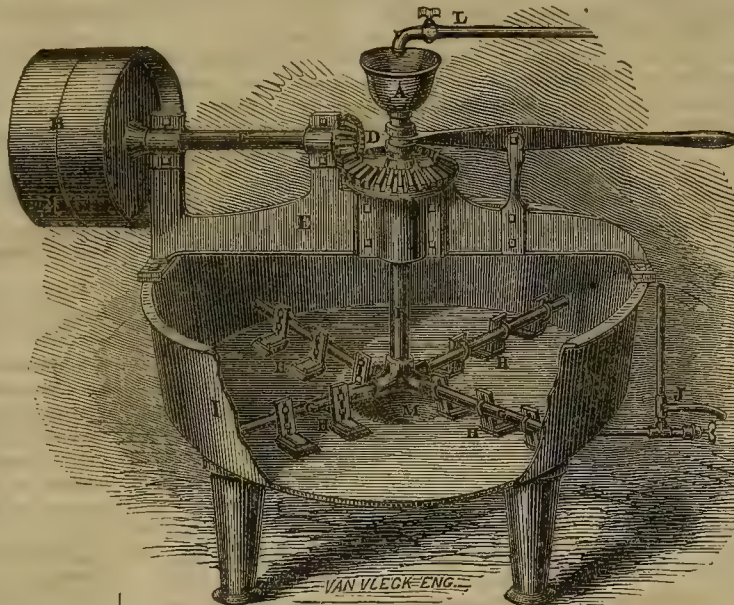
A heavy mining case which for the year past, has closed from work several of the most important mining operations in Grass Valley, has recently been amicably settled without recourse to the tedious and expensive process of law. The suit was brought by the Mount Hope Company, of New York City, against Chavanne & Co., of Grass Valley—being, we believe, a question of title. An injunction was laid upon the operations of Chavanne & Co., which also had the effect of closing the extensive operations of Messrs Watt & Co., Scadden & Co., and others, thereby seriously depressing the general industrial pursuits of the thriving mining community in which these works are located. We congratulate all parties concerned in their fortunate deliverance from an embarrassment more provoking than serious. We learn from the *National* that the citizens of Grass Valley were quite jubilant over the happy termination of the matter, as well they might be.

## NEW PROCESS FOR WORKING QUARTZ.

We have seen the drawings of a new machine for extracting gold and other precious metals from its matrix, which was patented about two years ago, and since which time the patentee has been diligently engaged in perfecting and reducing the same to practice. The machine has been put to practical work at one of the mills on Col. Fremont's Mariposa estate, where it has reduced quartz from several different veins, with the most complete and uniform success gaining more than one hundred per cent over the best apparatus heretofore employed there, at every trial upon poor qualities of rock. The patentee is now in this city busily engaged in erecting one of his machines which will be ready for operation in a short time. Due notice of its time of starting will be given and the public and all interested will be invited to examine the machine, and witness its working. No chemicals are employed in the process, which is simple and cheap. The inventor is a gentleman of high scientific and practical attainments, and, from what we have seen and learned, we are inclined to the opinion that the invention will prove a most complete success. At the proper time we shall give a full illustrated description of the same.

THE HENNESSY PASS is reported in fine condition for traveling. Stations have been located at every three miles on the snow belt, and whenever a storm commences ox-teams are immediately sent out and the track kept constantly beaten down. Stages run daily over this route.

Fogs are sometimes so thick in London that the gas has to be lighted in the streets as well as houses. A year ago last winter they were thus lighted on several occasions, during the entire day.



WHEELER'S PATENT SEPARATOR.

A represents a cup on the top of a hollow shaft for the admission of water.

B is the driving and loose pulley.

C is the horizontal driving shaft.

D is the driving gear.

E is the beam across the top of the machine which supports the gearing.

F is the upright hollow shaft which passes through the hollow journal on the gear wheel D, and is driven by a "feather" riveted on the outside of the shaft.

G G G G represent four hollow arms attached to the upright shaft F. These arms are perforated on the under side with small holes through which the water is introduced into the pulp, when diluting it.

H H H H represent the mullers attached to the hollow arms, which rub on the bottom of the Separator, for collecting the amalgam and quicksilver into the bowl M, in the centre; the bottom of the Separator being slightly concave.

I is the side of the Separator.

J is the tube from the bowl M, through which the surplus quicksilver passes out into a dish, as fast as it accumulates in the Separator. In the lower part of the tube a cock is placed, through which the quicksilver is drawn off entirely from the bowl M in the process of "cleaning up."

K is a forked lever which is used to raise the shaft F, with the arms G G G G, when the machine is stopped; thus preventing them from becoming fastened by the ore in the machine settling around them.

L is a pipe and cock for introducing water through the hollow shaft F, and the arms G G G G into the pulp for the purpose of diluting the same.

## Governor Stanford on Taxing the Mines.

Gov. Stanford, in his late Message, makes the following, practical and sensible remarks on the subject of the proposed taxation of the mines:—

The question of taxing mining claims by the General Government, after a long slumber, seems to be again revived. The agitation of this subject I cannot but regard as extremely impolitic. In a vast majority of claims it is impossible to estimate their value above what they may afford to the laborer from day to day, and with most of the balance there can be no certain permanency or reliableness of value upon which an assessment could be made with confidence or with satisfaction. A tax upon these claims can never be laid that would be just in its burdens or equitable in its results. When the sagacity and toil, the anxiety and patience, of the miner are rewarded with success, the results of that success, become the subject of taxation and the source of revenue. There can be no question that the people of the United States have reaped a greater harvest

of riches from our mines, under the liberal policy of the Government hitherto pursued, than they would have done had the discovery of our mineral wealth been immediately followed by Federal burdens, which must, of necessity, have been unequally imposed. It is a well known fact, that the yield of our mines finds an almost immediate distribution among our people, a fact that tends as much to strengthen the Government as though that yield went directly to her coffers. It is also well known, that while their yearly product is now equal to what it ever was, and while other interests and other communities are, through this influence, increasing rapidly in wealth, the mining communities do not advance—in fact, it is a question if they do not retrograde year by year.

Is it well, then, to place any discouragement upon an interest of such vast importance? Should it not rather be carefully fostered and judiciously encouraged?

Improvements above a certain amount upon mining claims, might, very justly, be made the subject of taxation with every other species of property which is created by wealth, industry, or skill; but if the General Government shall determine to change her policy as to our mines, and must have revenue direct from them it were better to dispose of the lands upon which they are found, in small quantities, having a just regard to the acquired interests existing under the past policy of the Government relative to them. I can see no good reason why the Government should retain to her use mineral lands more than agricultural lands for both must be equally developed by the industry of individuals, and both, without that industry, would be valueless to a nation.

\* \* \* The subject is one of importance, but I cannot here discuss it to the extent which it deserves. It is a good rule, however, "to let well enough alone," and is seldom departed from with advantage.



## MINING NOTABILIA.

**ESMERALDA MINES.**—Great activity appears to be manifested in working some of the principal mines in Esmeralda. The Wide West, and Pride of Utah are especially mentioned. We see it stated that still another lot of very rich ore from the former mine is about to be shipped to this city to be worked, which it is confidently expected will yield \$700 to the ton! Already four hundred tons of rock are out, and this, with the amount to be taken out during the winter, will keep four mills constantly at work till spring. A late number of the *Star* gives a lengthy description of a new quartz mill recently constructed at Aurora by John D. Winters, which will cost in the neighborhood of \$90,000.

**HUMBOLDT.**—Extravagant reports are current of a new Silver mine recently discovered near Fort Churchill, and known as the Blue Leaf. The mine is owned by a company of Germans, and is said to produce ore far superior to anything ever found in the Ophir or Mexican mine. Assayers and other competent judges of ores have declared this to be a fact—so it is said. It is more than probable that the country may produce a vein as rich, or even richer than the Ophir; and it is not at all improbable that the industrious Teutons aforesaid may have stumbled upon it.

A correspondent of the *Marysville Appeal* says that of the 6,000 claims that are recorded in this District, the Wide West, Antelope, Pride of Utah, and Esmeralda take the lead—not because they produce better paying ore, but that many other mines which prospect well and show well defined ledges have no moneyed managers, and have to wait till some men of means and business capacity take hold of those rich but neglected silver deposits.

Great complaint is made of a lack of suitable machinery in that district, and the writer above alluded to thinks any person will do well who will introduce some improvement in that particular.

The Pride of the Antelope, Gen. Jackson and Mount Broley are turning out rich ore. They were located some two years ago, but had to keep the native silver till touched by the magic hands of San Francisco speculators. The Wide West mill will be completed in about a month, and thus afford a better opportunity to those who cannot bear the expense of sending their rock to San Francisco for assay, to test the quality of their respective ledges.

The Territorial *Enterprise* learns from a gentleman direct from the Humboldt, that a very rich silver ledge was discovered about a month since in the Buena Vista District, the croppings from which assay \$1,600—it is called the Sargent ledge.

The Monitor, another new discovery is said to be proving itself exceedingly rich. Business in Humboldt is slackening considerably since Winter set in. John O. Fall's mill at Buena Vista was to have gone into operation a week ago Saturday, on some choice rock from the Mars and National leads.

**VIRGINIA CITY.** A recent run of the Central Mill in Virginia City produced one thousand pounds of bullion. Each ounce of this bullion is worth \$2 50, or \$7,500 for the run of twenty-four hours. This result was obtained from Gould & Curry ore.

A thorough test of the Whitman coal is now being made at Sutor's mill at Dayton. Considerable improvements are also going on there for the health and accommodation of the hands.

**A WISE PRECAUTION.**—Mr. Almarin B. Paul has taken the precaution to put in a large flume near his big mill, some four or five feet in width, by two and a half or three feet in height, and placed in such a position as to carry all the water of the ravine around the mill. All who were in the Territory last Winter will admit the wisdom of this precaution. There are other places along the canon, says the *Enterprise*, where flumes should be built, otherwise, property may be damaged.

**THE BLOCKADE.**—Up to the first of December 540 vessels, endeavoring to run the blockades, had been captured by the Federal cruisers. Their cargoes alone are valued at \$40,000,000.

**GOING.**—The number of Revolutionary Soldiers on the ion list, January 30th, 1862, was only 30.

**ONE YEAR'S TREASURE EXPORTS.**—The shipments of treasure from San Francisco, during the year just closed, were as follows:

To New York.....	\$26,194,034 93
" England.....	12,950,139 61
" China.....	2,660,755 29
" Japan.....	17,916 00
" Manila.....	65,651 64
" Australia.....	121 10
" East Indies.....	62,414 00
" Panama.....	434,507 79
" Hawaiian Islands.....	3,000 00
" Punta Arenas, C. A.....	10,000 00
" Mexico.....	5,000 00
" Victoria.....	188,221 71
Total.....	\$42,561,761 07

**ACADEMY OF NATURAL SCIENCES.**—The following named gentlemen have been elected officers of the California Academy of Natural Sciences for the ensuing year: President, Colonel Leander Ransom; First Vice President, Dr. J. N. Eckel; Second Vice President, Dr. J. B. Trask; Corresponding Secretary, Dr. Wm. O. Ayers; Recording Secretary, Professor W. H. Brewer; Treasurer, William Heffley; Librarian, Professor T. D. Whitney. Curators—On Mineralogy, Gideon F. Moore; on Botany, Dr. A. Kellogg; on Paleontology, M. S. Cobb; on Conchology, Dr. J. S. Cooper; on Entomology, Dr. H. Behr.

**MORE COPPER.**—The *Calaveras Chronicle* says that a new lead of copper has recently been struck near Campo Seco, on ground belonging to Mr. Chamberlain. Many rich veins of copper are already known to exist, several of which are now being worked in the vicinity of this discovery, and expectations are confident that the raising and shipping of copper ore will soon render Campo Seco one of the most flourishing mining camps in that region.

**ANOTHER.**—A new Copper mine has recently been struck near Hog Hill, about four miles from Copperopolis. It was discovered by Capt. Nulty & Co. It is a rich vein of sulphuret of copper and, it is said, the lucky finders have refused \$150,000 for their discovery.

**COPPER STOCK.**—One share in the Consolidated Copper Mining Co. was sold yesterday for \$100. The company was organized some two weeks ago, consisting of thirty shares, each representing 100 feet on the ledge, and the stockholders were at no other expense except to stake out and record the claims. The stock may therefore be said to have advanced from nothing to \$100 a share. [*Nevada Democrat*, Jan. 3d.]

**THE ACTON COPPER MINE.**—This mine, to which we alluded last week, has made its October report, which shows an average yield of 15 per cent.—a gain of 3 per cent. on its previous average. It is located in Canada about 50 miles from Montreal, and has recently been purchased by a Company of Boston capitalists. The ore is shipped to Boston via Portland, for working. The yield for October was 388 tons of copper. About 250 men are employed at the mine.

**THE ULSTER (N. Y.) LEAD MINE.** recently discovered, had been opened, at last accounts, only ten feet deep; yet it is thought by experienced miners that the developments already made are such as to warrant the conclusion that it will prove the most extensive and valuable lead mine in the world. The ore is of fine quality, and the facilities for working the mine and transporting the mineral to a market are very superior.

**COAL IN VICTORIA.**—A wealthy English Company has sent out an experienced mining and civil engineer to explore the island for coal. Should it be found of proper quality and quantity, the Company will immediately invest a large amount of capital in the enterprise. The engineer has already arrived at Victoria.

**ANOTHER ANXIETY.**—British capitalists express great anxiety in consequence of the rapid drain of specie from England to India. The payments for Indian cotton are becoming very heavy, the last steamer for Bombay having taken out about \$5,000,000—the largest amount ever dispatched to one port, although an equal sum has been sent before to the East in a single vessel for distribution among several markets.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the *MINING AND SCIENTIFIC PRESS*? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the *Press*, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the *MINING AND SCIENTIFIC PRESS*. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the *Press* for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

**CORAL AT THE FARALLONES.**—Coral was discovered a few days since on the Farallones, by a party connected with the Coast Survey. The color is red, and the branches are rather coarse in form and size. It was in the progress of formation, for the coral animals inside were still alive. Live coral, it is said is not found so far north in any other part of the world by several hundred miles. Similar coral has been found in Monterey Bay.

**NOVEL INVENTION.**—A Federal army officer has invented a method of disabling artillery when it becomes necessary to abandon it to the enemy, which is said to be most effectual, and most entirely supersedes the present method of "spiking." Any effort on the part of the enemy to remove the disabled instrument will instantly burst the gun, and scatter destruction among all who may be near at the time. Such an invention must give the party holding it quite an advantage over his opponent, so long as the secret is kept within the knowledge of one party only.

**LAND MONITORS.**—Mr. Redstone of Indianapolis proposes to build for Government nine "Land Monitors," or engines of war, to cost \$900 a piece, to weigh 1,800 pounds each, 25-horse engine, and all, with coal, water, ammunition, knives, &c., included in the above weight. Each to be handled by two men; to discharge from each 10,000 shots in half an hour; to be capable of running 20 miles an hour over any grade less than 45 degrees; to be perfectly manageable in turning, climbing or descending; to clear more obstructions from artillery roads than 500 men; to reap the rebels clear by divisions; to resist canister, grape, and small shot.

**RAILROADS IN THE SOUTH.**—The want of machine shops to replace rolling stock along the Southern railroads as fast as it is worn out and disabled is beginning to be seriously felt. The tracks are kept in repair by the rails which have been taken up along the border and carried South. What few repair shops they have are kept constantly at work and mechanics in this branch of business are highly prized. If the war continues much longer a majority of the Southern railroads must stop running entirely.

We would call the attention of our readers to the Stock Report which we give from week to week in the columns of the *Press*. This report is very full and carefully made up from the most authentic sources, embracing all attainable transactions both in this city and in Washoe. Our report, for this city, embraces a full statement of the sales at the Stock Board—each day's operations being presented in a tabular form. We also re-produce the substance of the several Mining Circulars issued in this city. In order to give each week's transactions, full and complete, we have changed our publication day from Saturday to Monday. We intend to make each number of the *Press* a full epitome of the mining intelligence of the previous week, and add thereto such matters of general interest and information as shall be thought useful and advantageous to the miner, and the mechanic.



# MINING AND SCIENTIFIC PRESS.

## SAN FRANCISCO MINING NOTICES.

**RED, WHITE AND BLUE G. & S. M. Co.**—An assessment of 125 cents per share, payable on or before Feb. 1st, at office, cor. Pine and Montgomery Sts.

An assessment of \$35 per share was levied Jan. 6, payable immediately, at office, No. 712 Montgomery street.

**Luna Copper Mining Company.**—The annual meeting of Stockholders for the election of officers, will be held, Jan. 23, at office, No. 502 Montgomery street.

**Live Oak Copper Co.**—The Annual Meeting of Stockholders for election of Trustees, will be held at Office, in Montgomery Block, Feb. 2, 1863.

**Gold Silver Mining Co.**—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

**Cedar Hill Tunnel and Mining Co.**—An adjourned meeting of Stockholders will be held, Jan. 15, at Office, Room 5, over Parrot's Bank.

**Mina Prieta S. M. Co.**—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

**Savage Mining Co.**—The Annual Meeting of the Stockholders of this Co. will be held at Office, 712, Montgomery St. Jan. 13.

**Union G. & S. M. Co.**—The regular quarterly Meeting will be held, at Office, 410, Montgomery St., Jan. 19.

**The Madison G. & S. M. Co.** advertise names of parties who are in arrears for assessments, and give notice that their stock will be sold on the 29th day of Jan. unless said assessments are previously paid.

**Franco-Americano S. M. Co.**—The following persons were elected officers at the meeting of trustees, Dec. 26th—Chas. F. Gann, *President* and A. S. Gould, *Secretary*. The office of this Company has been removed to No. 523, Clay street, Room No. 2.

**Sierra Nevada S. M. Co.**—The annual meeting for the election of Trustees will be held at office No. 40, Montgomery Street, Jan. 12th.

**Lucerne Mining Co.**—The Annual Meeting for the election of Trustees will be held at Office 114, Battery St., Jan. 12th.

**Central Silver Mining Co.**—The Annual Meeting for the election of Trustees will be held Jan. 13, at Office, No. 712, Montgomery street.

**Lady Bryan G. & S. M. Co.**—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

**Desert Mining Co.**—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

**Wide West Mining Co.**—The Secretary of this Company publishes an important notice to Stockholders, in the daily papers.

**Roose River Mining Co.**—Ten cents per share has been levied upon the capital stock of this Company, payable Jan. 14th.

**San Francisco S. M. Co.** have laid an assessment of \$25 per share, payable on or before Jan. 1st, 1863.

**Pacific Quicksilver Mining Co.**—Assessment No. 3, of \$1 per share was levied, Dec. 22, payable immediately.

**Keystone Copper Mining Co.** advertise for proposals to purchase or treat 3d quality copper ore. Proposals received till Jan. 15th.

**Mammoth Ledge Mining Co.** give notice of an assessment levied and payable on or before Jan. 13th. Also that the first annual Meeting for the election of Trustees will be held at office, Jan. 17th.

**Hale and Norcross S. M. Co.** have levied an assessment of \$5 per share payable on or before Jan. 26th.

**CHARLES CANY MINING Co.**—An assessment of \$1.50 per share was levied on the stock of this Company, Dec. 14th, 1862, payable on or before January 14th, 1863, at office, 338 Montgomery St.

**LIVE OAK COPPER MINING Co.**—Office, Montgomery Block—An assessment of thirty cents per share was levied, Dec. 1st, 1862, payable in thirty days.

**NORTH POTOTI SILVER MINING Co.**—An assessment of four dollars per share was levied on this Company, Dec. 11, 1862, payable on or before January 16th, 1863, at office, Cor. Battery & Washington Sts.

**MEREDITH GOLD & SILVER MINING Co.**—An assessment of two and a half dollars per share (five dollars per foot) was levied by this Company, Dec. 11th, payable immediately, at office, 712 Montgomery St.

**BULLION G. & S. M. Co.**—The Stockholders are notified

that they will hear something to their advantage by calling at the office of the Company, cor. Pine and Montgomery Sts.

**NORTON G. & S. M. Co.**—An assessment of two dollars per share was levied Nov. 25, payable on or before Dec. 30, 1862, at office 522 Montgomery St.

**Dios Padre G. & S. M. Co.**—An assessment of three dollars per share was levied, Nov. 29th, payable on or before Jan. 1st, 1863, at office 502 Montgomery St.

**EMMETT G. & S. M. Co.**—An assessment of twenty-five cents per share was levied, Nov. 21st and is now due, and payable at office 326 Clay St.

**VIRBARD G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office 326 Clay St.

**DOYLE G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office No. 326 Clay St.

**EL DORADO G. & S. M. Co.**—An assessment of one dollar per share was levied, Dec. 1st, and payable at office, on N. E. cor. of California and Montgomery Sts., or to Superintendent in Virginia City.

Another assessment of one dollar per share was levied Dec. 22, payable as above.

**IOWA MINING Co.**—An assessment of Four Dollars per share was levied, Dec. 4th, payable at office 522 Montgomery St. on, or before Jan. 3d, 1863.

**JOSEPHINE MINING Co.**—An assessment of two dollars per share was levied, Nov. 19th, and is now due and payable at office No. 21 Stephenson House.

**BURNSIDE S. M. Co.**—An assessment of one dollar per share was levied, Nov. 17th, payable within 30 days, at office 712 Montgomery St.

**HAWLEY MINING Co.**—An assessment of 50 cents per share was levied, Nov. 15th, payable at once, at office 204 Front St.

**AMERICAN QUICKSILVER MINING Co.**—An assessment of one dollar per share was levied, Dec. 16th, payable at Company's Office, in Petaluma, within 30 days—At the expiration of which time delinquent stock will be sold.

**NAPOLEON COPPER MINING Co.**—The first annual meeting of this Company will be held at office N. E. corner of Sacramento and Montgomery Sts., on Monday, January 12th 1863, at 8 P. M.

**BURNING MOSCOW S. M. Co.**—An assessment of Two Dollars per share was levied, Nov. 25, for the purpose of defraying expenses of steam pump and machinery now being erected to drain the mine. Prompt payment is requested at the Company's office, corner of Montgomery and Jackson Sts., to Jos. P. Nourse, Sec.

## WASHOE MINING NOTICES.

**Baltic Mining Co.**—Notice is given of an adjourned sale of shares in this Company, to take place on the ground, Jan. 31st.

**Progress G. & S. M. Co.**—An assessment of 20 cents per foot was levied, Dec. 27, 1862, payable forthwith.

**Sweezy Co.**—Washington Ledge.—An assessment of \$10,000 being \$5½ per foot—was levied on the stock of this Company, Dec. 28, payable at the Secretary's Office, Medan Building.

**MINERS' MEETING.**—At a meeting of the shareholders of the Siegel Mining Company, it was resolved that a meeting be called of all the miners of the Siegel Mining District, for the purpose of making laws by which said District may be governed, and that said meeting shall take place on the 15th day of January, 1863, in said Siegel District, in or near a certain place better designated as the Siegel Mining Company's Cabin.

**Caution.**—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Entente prise.)

**Ashland Co.**—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

**Eldorado G. & S. M. Co.**—An assessment of one dollar per share was levied, Dec. 31, 1862, payable, Jan. 22, 1863, to the Secretary, at corner of Montgomery and California streets, or to the Superintendent at Virginia City.

**La-Plata Oro Co.**—Gold Hill District.—An assessment of two dollars per share was levied, Dec. 26, payable at once, at Office of the Secretary, Court-house Building, Virginia City.

**Texas Co.**—Tennessee Ledge.—An assessment of 25 cts. per foot was levied, Dec. 22, payable on or before Jan. 21, 1863.

The Regular meeting of the Company for election of officers, will be held at the Comet Saloon, Virginia City, on Saturday, Jan. 21.

The North American Co., Gold Hill, will sell at auction,

Jan. 31, stock of shareholders delinquent in payment of assessments.

**Grass Valley Co.**—A meeting of this Co. will be held the "Medan," in Virginia City, on Thursday, Jan. 15.

**ASHLAND G. & S. M. Co.**—An assessment of fifty cents per share was levied, Dec. 10, payable at the office of M. J. Power, Sec., B. St.

**NORMAN SILVER MINING Co.**—An assessment of One Dollar per share was levied, Nov. 19th, payable on or before Dec. 31st, to the Superintendent in Virginia City, or at the office, No. 40, Montgomery Street, San Francisco.

**MARTIN WHITE MINING COMPANY.**—An assessment of ten cents per foot has been levied, payable to the Secretary, at office on C Street, Virginia City.

**THE SWEENEY Co.** Gold Hill, give notice that Paltic Company have wrongfully claimed and worked their ground since July, 1860.

**POORMAN G. & S. M. Co.**—An assessment of Five Dollars per share was levied, Nov. 9th, and another of Ten Dollars per share, Nov. 21, payable at once to the Secretary, R. J. Michel.

**COLEDONIA TUNNEL AND MINING Co.**—An assessment of Thirty-two Dollars per share was levied, Dec. 8th, payable immediately to the Secretary, Martin White.

**THE CHIMNEY ROCK Co.** lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Bach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

**LA CROSSE MINING Co.**—An assessment of \$1.25 per share was levied, Dec. 8th, payable at office 73 C Street, Virginia City.

**HAWK EYE SILVER MINING Co.**—An assessment of 25 cents per foot was levied, Dec. 6th, payable immediately to S. A. Kellogg, Sec. Gold Hill.

**MOHEGAN Co.** Cedar Hill.—An assessment of fifty cents per foot was levied, Dec. 5th, payable forthwith, to the Secretary at Virginia City.

**ORIENTAL G. & S. M. Co.**—The 2d assessment of 15 cents per foot, was levied, Dec. 8th, and is payable at office, No. 31, C Street, Virginia City.

## ESMERALDA MINING NOTICES.

**THE ZENOBIA LODE COMPANY**, give notice that they claim a superior title to the Johnson Co. claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder.

## MINING AND SCIENTIFIC PRESS.

**THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.**

**THIRD YEAR! VOLUME VI.—NEW SERIES!**

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information, concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2.00. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

### EWER & SMITH, Publishers,

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



## Mining and Scientific Press.

W. B. EWER, EDITOR.

MONDAY ..... JANUARY 12, 1863.

The MINING AND SCIENTIFIC PRESS is published at the Federal Building, Room 24, corner of Battery and Washington streets San Francisco, Cal., at Fifty Cents per month, or \$1 per annum, in advance. Advertisements, Fifty Cents per line. A liberal discount made to quarterly advertisers.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## COPPER MINING.

In an article under the above head in our last issue, we stated that copper ores of less value than 20 per cent. were regarded, in this market, as unprofitable for shipment. We have since learned from parties largely interested in copper mining, that contracts are now being made for shipment of as low a grade as 12 per cent. One contract involving the delivery of several thousand tons has recently been made in this city by the Napoleon Copper Mining Co.—based upon that per centage and upwards. According to the reports of competent judges, whose opinion are founded upon reliable assays, the general average of the unassayed ore, as it comes from the principal mines of Calaveras, will exceed the figure named: very little, if any being taken out which falls below 8, instead of 5 per cent. as we stated last week.

The opinion generally obtains that all below 20 per cent. is valueless in this market, and we had intended to show in the present issue, by reliable data, that such could not be the fact. The information furnished us, as above, renders such an exposition unnecessary, and we can now assure miners that they can obtain favorable advances in this city on ore rating as low as 12 per cent.

The contract of the Napoleon Co., of Calaveras County, is for a term of three years, the contractor, a large capitalist of New York, taking all ore from 12 per cent. upwards. The delivery is made at the ship's tackle in this city, payable in gold coin, and the assay is to be made here. Shipping merchants here, anxious for return freights to New York, are willing to advance say 50 per cent. on 15 per cent. ore, basing the price on the specie value in New York or Boston. The currency value is \$5 75 to \$6, to the one per cent of the assay which, on 15 per cent ore, is from \$86 to \$90 per ton. It is understood that these same parties have written to their correspondents East, for further advices, and that, in a short time they hope to be able to advance on all ore assaying 10 per cent. and upwards. Our readers will recollect that Currency now rates 35 per cent less than Specie.

Boston, New York, and Swansea (Wales) are now competing for our ore. Baltimore will soon make a fourth bidder.

To show the profitable character of copper mining we again refer to the Napoleon Company:—

Cost of taking out one ton of 22 per cent ore.....	\$ 3 00
Sacking, teaming, freight, drayage, etc .....	12 00
	\$15 00
Sale of one ton of ore in San Fran. for gold \$66 00	

Net profit .....\$51 00

Again, the company above named have been in operation only seventy days; yet they have erected steam works, machine shops, houses for miners, superintendents' offices, etc., and all without levying any assessment. The ore sold having paid all expenses, with the prospect of an early dividend.

According to present indications, copper veins are quite as generally diffused throughout the mountains of California

as gold bearing veins, and wherever found, the former are far more profitable and reliable than the latter.

When the special attention of capitalists was first directed to the Copper mines of Cornwall and Devon, it was the opinion of scientific men and all those who examined into the matter, that the "lodes" as they were called, existed only to a limited extent both in territory and numbers. Indeed it was not until the commencement of the present century that the contrary opinion began to prevail, and up to 1825 only 188 companies were engaged in this business. This number had increased in 1855 (30 years afterward) to 633. This result, it should be remembered, is confined almost exclusively to a territory not much larger than the single County of Calaveras, and the yield from which, in copper alone, exceeds at the present time over \$5,000,000 in value, annually—and that too, derived from a class of ore that rates at the very low grade of only 6 1/4 per cent!

All known facts go to show that the copper mines of California are quite as reliable in their depth and extent as those of England. In the latter country numbers of copper mines are now worked to a depth of from 1,000 to 1,500 feet, and some have been traced, in their linear extent, five or six miles. The heaviest class of steam engines are employed in draining some of these mines. In the "Consolidated Mines," for example, three engines are employed for that sole purpose, the largest of which has a cylinder of 90 inch s, inside diameter, with a stroke of 9 feet 11 inches. It is rated at 310-horse power. This mine alone, from 1815 to 1856 yielded copper to the value of nearly \$15,000,000.

From the above data, it will not require any very great stretch of the imagination to place the value of the copper interest of California, within the next decade, nearly upon a par with that of gold at the present time. Within one year we shall probably be prepared to smelt our own ores and thus vastly increase the value to the state of a given yield of ore over that realized at present. Smelting works will no doubt be erected, at convenient points for the delivery of ore and procurement of coal, as fast as the mines are developed. Statistics show that even with the large increase anticipated, there need be no fear that the supply will exceed the demand to a degree which will materially affect the price. The consumption of copper is rapidly increasing, and the production has never yet been equal to the demand. England, notwithstanding the constant and rapidly increasing yield of our mines, is a large buyer. Her imports for 1851 were, in round numbers, 48,000 tons; in 1858, the latest date we have at hand, they were 76,000—an increase of about 60 per cent. in four years. Copper may henceforth be set down as one of the staple productions of California.

## MR. LATHAM'S MINING BILL.

The Washington correspondent of the *Alt.* writes as follows in reference to the Mining Bill recently introduced into the Senate by Mr. Latham:

"The bill of Senator Latham, for the development of the mineral resources of California and the Territories, directs the Commissioner of the Land Office to continue his investigations in relation to the mineral wealth of the country, by means of survey, etc., and authorizes explorations, practical and scientific experiments, the collection of specimens, new improvements in assaying metals, experimental test of value, etc.

If the Commissioner is not more successful in collecting reliable data in the future, than, judging from his late report, he has been in the past, the country will derive very little benefit from his investigations."

QUARTZ REDUCTION IN SAN FRANCISCO—The Pacific Metallurgical Works, in this city, during the past week, have reduced two tons of ore from the claims of the Sacramento Company, on Cedar Hill, Virginia City, the product of which was \$1,113 65 in gold, and \$40 57 in silver.

They also reduced two tons of rock from the Wide West lead, Esme alda, from which they took \$1,900 in gold and silver.

PARTIES interested in Washoe will find some pieces of rock, at the office of the Jewel Gold and Silver Mining Co., No. 612, Merch on street, which are worth looking at, and which the Secretary, Mr. Armstrong, will take pleasure in submitting to their inspection.

## Report of the Land Commissioner on the California Mines.

The report of the Land Commissioner to the Secretary of the Interior, so far as it relates to the mining interest of this Coast, betrays a lamentable lack of information in an Officer of the Government, whose duty it is to collect valuable information for his particular bureau, upon which Congress is expected to base legislative action. The Commissioner indulges in a class of estimates with regard to the mines, most extravagant, and so loose as to be almost utterly without foundation; and upon such fancies proceeds to demonstrate that an immense revenue may be derived therefrom in aid of the National Treasury. "This year," he says, "they should yield \$10,000,000." After assuming that the national debt, on the 1st of July next will be \$778,000,000, the Commissioner says:—

"A tax of some 8 per cent. on the whole yield of the mines would, upon the maturity of a proper mining system, and when the same shall eventually go into full operation, pay off this interest, enable the Government to reduce by at least two-thirds the existing direct tax, and from the residue and imposts have an annual income sufficient to support the Government and provide a fund for the gradual extinction of the public debt and restore the currency to a metallic basis."

The above estimates are based upon the supposition that the mines of the Pacific Coast will yield \$100,000,000 the present year and that that sum will soon increase to three and four times that amount! "The product of Salm n River Mines," he says "has been estimated at, \$20,000,000 for the present year"!!

Such estimates, outside of the Secretary's otherwise valuable report, could scarcely be found in any other documents than those of the purest Munchausen school.

Another notable example of the inexcusable looseness of the Commissioner's assumptions and estimates may be found in the following quotations from his Report:—

The usual size of a quartz claim in the mining region is 100 feet on the line of the lode or vein, and 100 feet on each side, equal to an area of 20,000 square feet; or, say, 1,200 claims to the square mile. Allow that at only one-hundredth part of the mountain surface is occupied by paying leads or veins, there will be space for 3,600,000. But Governor Evans of Colorado estimates the already discovered gold bearing region in that Territory as affording ample room for 8,000,000 claims, and states that new discoveries are daily increasing this area.

A glance at the map is sufficient to show that the mineral region of Colorado occupies less than one-sixth of the whole extent under consideration; but assume it to be one-sixth, there will be ample extent on this basis for 4,800,000 claims, which, if worked, would give employment to 20,000,000 of men. Quartz that yields \$12 per ton will pay in favorable localities \* \* \* Some of the recent discoveries are estimated as high as \$20,000 per ton, but these have not yet been worked.

It seems scarcely possible that such estimates and assumptions, as we have quoted above could find their way into so grave a document as the Report of a leading Department of State. We must certainly suppose that the Honorable Commissioner could never have obtained his information from any member of the California Delegation in Congress. From our personal knowledge of the watchfulness and intelligence of our energetic mining member, Mr. Sargent, we feel quite confident that this report will be so thoroughly "ventilated" on the floor of the House, that the members and their constituency will promptly abandon all hope (should any have been engendered by the Commissioner's flourish over our fabulous wealth) of any such relief from general taxation, as is shadowed forth in the remarkable document under consideration.

The Commissioner gravely and unqualifiedly assumes that the yield of the current year will reach \$100,000,000. In another column we have given an accurate report of the shipments of treasure for the year ending Jan. 1st, 1863, which foots up, all told, only \$42,561,761. This shipment, it should be recollected, has been made under the unusual stimulus of an extraordinary demand for gold at the East, and the existing apprehensions of serious business derangements, which have had a tendency to remove much timid capital, for foreign investment. There is not one particle of evidence which would lead to the probability of a single dollar's increase of next year's shipments, from this except the possible additional yield of one and perhaps two million from Nevada Territory. The Secretary's estimate



All intelligent persons, we believe without exception, who have made themselves acquainted with the mining interests of California by personal observation, are agreed in the opinion that no system of laws can be devised which will more rapidly develop the mines than that which now obtains. With regard to revenue, unless Government despoils miners of their possessory interests, and sells the same, it cannot hope to realize much except from a limited portion of the best paying mines. The proportion of the mining yield which might thus be reached would not much, if any, exceed one-fifth of the entire yield. The true and only practicable policy for Government to pursue is to be satisfied with the application of the increase tax to such mines as it will reach, and look for the chief benefit to be derived, to the commercial advantages which will accrue from the increase of a substantial circulating medium. The gold which our miners are taking out is rapidly made to create values which at once form permanent material for legitimate taxation. Let Government have a care that it does not kill the goose that is laying its golden eggs with such promptness and regularity as to make it the envy and astonishment of the world. We would close by referring the reader to the pertinent and practical remarks of Governor Stanford in his late message under the head of Mines and Mining.

On Friday even'g, November 21st., an explosion, under very similar circumstances, took place, at Taylor's Saloon, corner of Broadway and Franklin streets, New York. People using gas should watch and promptly stop any leakage, in their premises, else accident may happen.

Names of Companies.	Total No. Shrs.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Ophir	16,800	12	300	2000	2050	2100	2450	2550	2600
Gould & Curry	4,800	4	500	12	—	—	—	—	—
Central	1,800	12	300	12	—	—	—	—	—
California	1,800	12	300	12	—	—	—	—	—
Chollar	3,600	3	500	350	375	379	380	380	380
Potosi	4,400	1	400	115	110	—	—	—	—
Hale & Norcross	8	0	2	500	4	460	—	480	—
Sierra Nevada	5,600	4	300	63	61	63	63	64	92½
Danely	2,800	2	500	—	—	—	—	—	—
Burning Moscow	4,800	2	100	56	62½	60	61	61	63
North Potosi	3,600	1	300	—	—	—	—	—	8
Wagers, F. D.	2,000	12	150	1	10	—	12	5	—
Maricuth	7,200	2	125	21½	—	—	—	25	—
Charles Caney	1,800	1	300	—	—	—	—	—	—
Sacramento	1,800	—	500	—	—	20	—	—	—
Lucerne	10,000	1	500	—	—	4½	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel	—	—	—	—	—	—	—	—	—
Moan Davidson	10,000	3	200	4	4½	—	4	—	—
Wide West §	8,600	4	60	390	287	300	352½	350	360
Antelope	1,200	1	500	—	95	110	115	130	152½
Esmeralda	1,600	1	1000	—	—	—	—	—	—
Real Del Monte	4,400	1	400	18	18½	20	18	19½	24
Etna	1,200	1	100	—	4	—	8	—	—
Utah	—	—	—	—	—	—	—	22	28
Silver Hill	—	—	—	16	16	18	18	18	21

The Gould & Currier is also steadily improving closing the week at \$200 advance. A settlement was made on Tuesday with regard to the 118 feet at the South end of the mine, in dispute with the Savage Company. The G. & C. agree to pay for the same \$24,000—half down, balance in 60 days. Dividends for January on 220 feet have been sold at from 81 to 82½ dollars per foot. Sales of 131 feet are reported; buyers more plenty than sellers. The mill, which has been stopped for several days to finish up some part of the works, is about ready to start again.

The Savage is still upward in its tendency—having advanced \$100 the past week. Stock in demand. This mine is being placed in working order with every possible dispatch, and it is believed that within 60 days, ore for

Silver Hill has also advanced \$6.

Ophir—6 shares at \$2.050 per foot; 24 at \$2.075; 36 at \$2,300; 60 at \$2,400; 120 at \$2,525, 30 days; 120 at \$2,500; 36 at \$2,600, 24 at \$2,000 78 at \$2,075; 24 at \$2,100; 42 at \$2,800; 24 at \$2,500 and 126 at \$2,550.

Gould & Curry—20 at \$2,800; 20 at \$2,825; 16 at \$2,900, Feb. 1st; 40 at \$2,900; 4 at \$3,000, 1st February; 40 at \$3,000.

Chollar—20 at \$377; 20 at \$375; 20 at 400; 40 at \$390; 20 at \$400; 28 at \$405.

Savage—20 \$765; 10 at \$800; 20 at \$800.

Potosi—20 shares at \$110.

Sierra Nevada—10 at \$62½; 10 at \$63; 15 at \$61; 20 at \$64; 10 at \$70.

Burning Moscow—20 at \$60; 30 at \$61; 5 at 62½; 10 at \$64; 10 at \$60 62 at \$65; 40 at \$75, 60 days.

Charles Caney—10 at \$19.

Meredith—32 shares at \$22; 82 at 21½.

Central—60 at \$1,700 on New York account.

Hale & Norcross—20 at \$500; 13 at \$525; 13 at \$525; 5 at \$535.

Iowa—10 at \$130; 10 at \$125; 10 at \$120.

Hazel Green—50 at \$1½; 20 at \$1¾.

Wide West—40 shares at \$300; 100 at \$300; 10 at \$325; 16 at \$320; 26 at \$320; 10 at \$340; 10 at \$367½; 15 at \$355.  
Antelope—10 at \$100; 10 at \$150; 10 at \$150; 10 at \$142½; 10 at \$155; 25 at \$130; 10 at \$146; 10 at \$150; 10 at \$152½.  
Main Esmeralda—15 at 50 dollars.  
Real-del Monte—50 at 20 dollars.  
Utah—20 at 40 dollars.  
Fifty feet of the January dividend of Gould & Curry sold for \$81½ per ft  
Ten feet “ “ “ “ “ “ “ “ \$82½

The Josephine has been but little enquired for the past week. It changed hands at the Stock Board from 10 to 13 dollars,—Holders asking \$17 to \$20  
Coco—Not quoted, \$25 asked.  
Willow Springs—held at \$40 Sold at \$10.

Mina Prieta finds no recent buyers, but is held at \$140.  
Dios Padre is quoted at from 32 to 36½ dollars.

The Enterprise thinks the favorable appearance of the Stock market, at the present time, is a good augury of the future favorable effects of the Incorporation Law.

Considerable Humboldt stock continues in market, but aside from the Mars, Cuba, Sheba, South Extension of the Sheba, and three or four other claims, there is little or no inquiry in that direction. There is also a large quantity of Eagle and Silver Mountain district stock, but entirely without buyers.

Santa Fe	\$25 00	Summit	\$5 00
Empire	6 00	Washington Leds	6 00
McBee	25 00	Milton	20 00
Belvidere	15 00	Laboring	15 00
Peytona	25 00	Swezey	15 00
Durgan	4 50	Caledonia	8 00
ElDorado	70 00	St. George	4 00



## Wheeler's Amalgamator and Separator.

On the first page of to-day's issue we give an illustration of a new machine, recently invented by Mr. Zenas Wheeler of this city, designed especially for separating and collecting the amalgam from the ores of gold and silver, after the ores have been thoroughly reduced by the most severe process of trituration in the amalgamating pans, represented on this page. The machine first above alluded to is called a "Separator." The amalgamating pans were first illustrated and described by us in our issue of December 29th, 1862, and now reproduced on this page. They are fashioned, in their general construction, very much after the usual plan of this class of machines, when used with a steam chamber for the purpose of heating the pulp. Its internal arrangements present important improvements over most other pans that we have examined, and which are readily apparent to any practical miner who will carefully examine the illustrations herewith presented.

The Separator is something entirely new and must commend itself to every quartz miner. Heretofore the "cleaning up" has been made direct from the pan, which necessarily caused much delay, and is, at best, but imperfectly performed. One Separator is designed to be used with two or three pans.

After the ore has been operated upon in the pans for a sufficient length of time to reduce it to an impalpable powder and thoroughly amalgamate all the mineral, the entire mass is drawn off into the Separator. The bottom of the pan is slightly concave, with a small bowl-like depression in the center, and entirely below the reach of the stirrers. Into this bowl the amalgam, as fast as it settles, finds its way, and when once there, is at perfect rest until the machine is cleaned up. These machines have been for several months in use at the Zephyr Flat Mill, in Carson Valley, where both the Amalgamator and Separator have proved themselves superior to any other apparatus in use there. By this machine the labor of cleaning up is greatly reduced and simplified. By the use of the Separator, the pans are never required to be stopped except to be recharged or have the dies renewed.

Perhaps the best test of the value of these machines may be adduced from the fact that no perceptible loss of quicksilver has yet been noticed, from the working of this machine, which cannot be said of any other in use. All miners who have examined these machines speak most favorably of them. They may be seen in operation every day at the Miners Foundry, on First street in this city.

The issue of the Press containing the illustrated description of Wheeler's amalgamator having been exhausted, and having had numerous calls for the same which we have been unable to fill, we re-produce the illustrations, to-day, in connection with the "separator," which appears upon our first page. See editorial notice in another column.

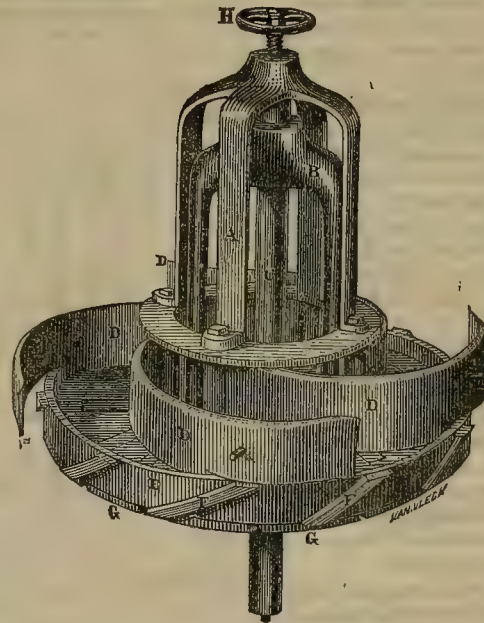
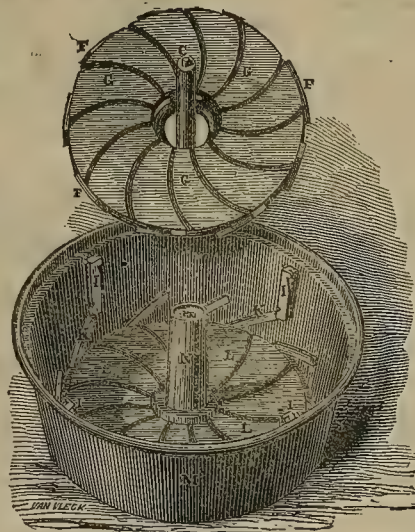
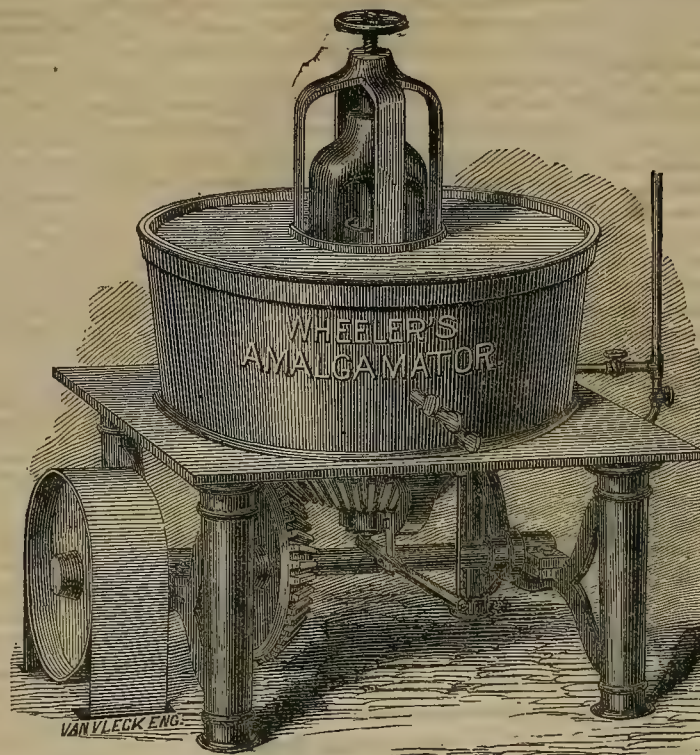
The upper of the three accompanying engravings represent a perspective view of a new amalgamator recently patented by Mr. Zenas Wheeler, of this city, as it appears when at work.

The engraving upon the left represents the amalgamator opened. In the bottom of the pan M are seen the dies L L L. The inclined spiral ledges K K on the side of the pan are designed to create an upward current of the pulp by which it is forced again to the centre of the top of the muller, and thence through a proper opening, underneath the same, for re-grinding. This current is kept up, so long as the machinery is in motion, and by thus constantly chan-

ging the particles, every portion of the ore is soon reduced to an impalpable powder, and in much less time than by the ordinary mullers, where no such current is established. The letters G G G represent the muller raised from its place in the bottom of the pan with the face turned toward the observer, exhibiting a set of shoes, which, like those in the bottom of the pan, are also moveable, and may be readily replaced when worn out. The letters I I represent supports for the stationary wings D D D, as represented in the engraving upon the right. The office of these wings is to aid in forcing the current of ore to the center of the pans as described above.

A, in the engraving upon the right represents the support of the inner end of the wings which are adjustable by the screw H upon the top of the shaft C. B is the driver, which carries the muller E. G G represent an end view of the shoes on the face of the muller. F F are inclined spiral threads on the outer edge of the muller, which in connection with the spiral ledges on the pan create the upward current as before described.

The steam pipes represented upon the left of the upper fig-



ure are designed—the lower one to carry steam to the steam chamber, beneath the bottom of the pan for heating the pulp, and the upper one to convey the steam directly to the pulp in the pan.

## California Made Pianos and Musical Artists.

Agreeably to an invitation we repaired to Tucker's Academy, a few days since, where it was announced that a Musical *Matinee* would take place. Although the day was inclement, the Hall was filled to overflowing. The Academy Rooms, however, we are pained to say, are far from being suitable for chaste musical performances. The stage was occupied by two grand Concert Instruments, recently manufactured by the celebrated Piano maker, J. Zech, on California street, and are the finest ever made on this Coast. The quality of their tone is far better and more agreeable than those imported. Their external appearance is chaste and exquisite. Zech's Pianos have become popular on this Coast, and he cannot be excelled in the manufacture of this instrument by the most renowned makers in Europe or the Atlantic States.

The *Matinee* was produced with great effect by the following artists:—Pianists, Messrs Rodo Sipp, Staderman, Evans and Shultz; Flutist, Capity; Violincello, Stochr, and our esteemed friend, Ehrich, Violin *Primo*.

The selections were from the greatest masters. We have neither time nor space to offer comments upon the several productions performed, but would remark that they were rendered in a style and spirit truly artistic and, as such, vociferously applauded. The inclemency of the weather has had effect generally upon string instruments, which was partly the cause of the exclusion of DeBuriot's Concerto as announced, and which would have proved the gem of the day. It is rumored that a subscription Quartette of string instruments will soon be inaugurated here when only Mozart's, Beethoven's, Mendelssohn's and other celebrated productions will be given. We wish it a speedy success. It will have our aid. J. S.

THE NEW QUARTZ MILL, a working model of which was recently in operation near the corner of Third and Townsend streets has since that time been much improved by the patentee, Mr. Pond, and a new one of larger dimensions is

now at the Miner's Foundry, nearly completed. It will be in operation in a few days. Notice of the same will be given in the morning papers. Illustrative engravings of the same are now being prepared which we hope to lay before our readers next week. This is one of the most original Quartz Mill Inventions we have seen for a long time, and bids fair to prove a most complete success.

RUDOLPH SIPP—PIANIST AND COMPOSER.—We have been favored with the acquaintance of the gentleman whose name heads this notice. In an issue of the *Leipzig Illustrated Journal* dated April 8, '57 we find a high compliment paid him as artist of merit, at the same time announcing his departure for South America. Mr. Sipp is our Countryman, as well as an scholar and a gentleman and we bespeak for him a long and continued success in California. His musical compositions rank among the best.

A CONTRACT.—Horatio Lombard, of Chicago, has obtained from the War Department a contract to follow the army of the Potomac and collect the hides and tallow of all the cattle slaughtered for the use of the army. There was a good deal of competition, there being over forty bidders. Mr. Lombard's was \$7 80 per head, and was accepted.



Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent Right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

PACIFIC PATENT AGENCY, J. SILVERSMITH, SOLICITOR.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company, at Aspinwall.

FOR PANAMA,

The following Steamships will be dispatched in the month of January, 1863.

Jan. 10th—St. LOUIS, Captain E. S. Farnsworth,

21st—GOLDEN AGE, W. H. Hudson, Commander.

Will leave Folson Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for N. York

For freight or passage, apply to

A. B. FORBES, Agent.

Corner of Sacramento and Leidesdorff sts.

Je4

LATEST IMPROVEMENT

In LADIES' BUCKLES.

MR. REICHEL, RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address,

FREDERIK REICHEL,

Manufacturing Jeweler, 620 Merchant street, San Francisco.

sep11

REMOVAL.

OFFICE OF THE PACIFIC METALLURGICAL WORKS is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent, 318 California street, near Sansome, up stairs.

my30

WRIGHT'S PICKS.

WRIGHT'S PUNCH PICK

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

Je20

LABOR-SAVING

Rock Drilling Machines.

TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRY-men. The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

HAND, HORSE, AND

STEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way.

A FOUR-HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process.

Address orders to WM. W. DUNN, Fremont street, bet. Market and Mission, San Francisco.

oct7-8m

A. ROMAN & CO.

WHOLESALE AND RETAIL

BOOK ESTABLISHMENT.

417 and 419 Montgomery street, SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington Pagot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying, by Phillips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide, or Practical directions to Assayers, Miners and Smelters

Practical Assaying, by Mitchell.

River Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Woolbach's Mechanics of Machinery and Engineering.

Novello's Hydraulic Formula Tables.

Frederick's Chemical Analysis.

Together with many other works in this & similar lines

Books imported to order on short notice.

A. ROMAN & CO.,

417 & 419 Montgomery Street.

Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS, OR manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentee.) San Francisco.

sep1-3m

Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen

Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an

JUL. SILVERSMITH, Federal Building, Room 23.

RASCHE & SONS,

131 Montgomery street., bet. Bush and Sutter, SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

PIANOS, SHEET MUSIC

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;

T. GILBERT, Boston;

C. MEYER, Philadelphia.

Whose Pianos they have always on hand, for sale and to rent.

PIANOS FOR RENT.

New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the trade and professors of music.

au14

MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise.

Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c., &c.

Light's New Patent Insulated Iron Frame is put into all of

Light's & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

oc7

A. KOHLER, Agent.

Dr. Van Zandt,

Consulting Physician and Surgeon,

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity! Made Subservient for the Cure of all Nervous and Spinal Diseases.

THAT THIS PRINCIPLE, successfully applied to diseased states of the system, is to prove the great sought for necessity, long wanted by physicians, to all their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equi-librium of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a want of forces going on in our system? This needs correcting, and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

Awaken the Magnetic Life Within Us,

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRICAL excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct views of the origin of all their maladies. Ladies can consult him with entire confidence, as he is no speculator upon human ills—but is proving himself the only member of the legitimate profession in California who is really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately attuned nervous organism, together with their great sympathetic life, renders him doubly able to assuage those silent complaints which they bear so patiently and so long. No social disquietude need longer afflict our home circles; for he can arouse the stricken energies; restore the wonted tonicity of the body; awaken the melancholic and despondings; arrest those drains which cause so much anxiety; cure those protean maladies which have so long

Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength; extreme debility and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exerting the Electro-Galvanic current, together with his remedial measures which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore you to usefulness, and spare you a blessing to your family and to society.

All the World Over

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is as necessary to restore the ELECTRO-GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and verified by hundreds of patients; so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unassailable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, mental and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or euboeitic habit of body,

None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—depression of spirits which weigh you down—wakefulness that knows no sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you a radical removal of all bodily and mental infirmities, within the scope of science and man to remove.

The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made these afflictions an especial study, and that he is the only Surgeon in our State, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataract, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29-3m

FREDERICK KESMODEL,

Cutler and Surgical Instrument Maker

517 KEARNY STREET,

Between Jackson and Washington streets,

SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are all uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL, Inventor and Patentee.

ap3 tf



## The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities.

The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a news stand and large Cabinet for minerals; also, a Branch Telegraph Office connecting with all the lines throughout the country.

LEWIS LELAND & CO.,  
Proprietors.  
San Francisco, Jan. 1st, 1863.

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as Mining Superintendent in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assessor of Copper Ore. He can give ample testimonies as to his capacity for the position he seeks.  
Apply at this Office.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cut mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to  
HARVEY S. BROWN,  
No. 19 Nagle's Building.

Lithographic Maps can be seen and had at the above named office, no 18 6mo

## V. SQUARZA'S

## Punch Factory.

MR. SQUARZA IS FAVORABLY known in this State for his Anti-Divorce Liquors and similar productions, as manufactured by him. We may mention that Mr. Squarza is an aid in the chemico-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

And CHAMPAGNES of all brands.

## WASHOE

## Stock Exchange,

N. E. cor. Montgomery & Merchant sts.,  
SAN FRANCISCO.

L. W. NEWELL & CO.,

Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.

## PHILADELPHIA BREWERY,

Second St, corner of Folsom, SAN FRANCISCO

Helscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

Nov 9

## FULTON FOUNDRY & IRON WORKS.

HINCKLEY & CO.,

MANUFACTURERS OF STEAM ENGINES,

Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings, Mining Pumps, and all kinds of Machinery Amalgamators, Etc.

Nos. 47 & 49 First Street,

Between Market and Mission, San Francisco.

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to order when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.

D. B. Hinckley, Wm. E. Worth. Wm. A. Field.

## DONAHUE'S

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST MILL Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patents in the State, a list of which will be forwarded to anyone desiring it, free of cost.

PETER DONAHUE.

LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

J. N. RISDON.

PALMER, HANSCOMB & CO.,

GOLDEN STATE FOUNDRY

AND MACHINE WORKS.

First Street, near Market, San Francisco,

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications. Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast.

3m

## GREAT REDUCTION

IN PRICES.

STANFORD BROTHERS,

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

Lamp Stock

And will Sell Cheaper than any other House in this State.

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, Etc.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

ap16tf

## Holiday Presents!

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

BRAVERMAN & LEVY'S,

621 Washington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. Also,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY.

No. 621 Washington Street, Facing Maguire's Opera House.

Dec 29 1m

LEANDER RANSOM,

Civil Engineer

AND

SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets.

oct 3m

## Agency For Patents.

THE UNDER-SIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,

Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—(Evening Bulletin, Aug. 4.)

## THEN THIS!

Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

## For Sale Cheap!

A HORIZONTAL STEAM ENGINE OF 4-Horse Power, Fine Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,

Federal Building, cor. Battery and Washington Sts.

Room, No. 23.

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABMET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Gar ratti's Patent Improved Journal Metal."

F. G. BEPLER,

Practical Coppersmith

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery, SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work. All orders from the country promptly attended to.

## DEETKEN'S

Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek, SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 10 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, it desired by mill owners. No power nor clean water required for the purpose.

nov 8-2m

SQUARZA'S PUNCH.

HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff St., near Sacramento. Branch at 406 Montgomery street.

my 30

JULIUS SILVERSMITH,

Commissioner for Nevada Territory,

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets, Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

JAMES PHELAN,

(Late J. & M. PHELAN.)

IMPORTER AND JOBBER,

Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets, SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.

TERMS LIBERAL. Jan. 1-1f.

THEODOR KALLENBERG,

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. No. 4 Sansome street, corner Market, au7.3m) San Francisco.

DEVOE & COS.'

STEAM ENGINE

—AND—

MACHINE WORKS,

Corner Market & Fremont streets,

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILLS, Irons, Flour Mills, Quartz Mills etc., etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT Cutting AGRICULTURAL MACHINERY made and repaired. Repairing of Machinery promptly attended to. No. 4 Sansome street, corner Market, au7.3m) San Francisco.

Steam Engines and Boilers constantly on hand, and for salecheap. Screw-Cutting and Turning Lathes for sale.

DEVOE & CO.





A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, MONDAY, JANUARY 19, 1863.

NO. 12.

#### PROSPECTING FOR COPPER.

As the attention of prospectors, in California, at this time, appears to be very generally directed to Copper, as a present speciality, we have thought it might be opportune to give a few hints which may be of service in such researches.

The ores of copper are quite numerous and present a great diversity of appearance; yet they are all very readily distinguished by certain chemical re-agents, from non-cupreous ores. The presence of copper in any ore, even to as low a per centage as a fraction of only one per cent, may be readily ascertained by first calcining and then finely pulverising the ore and subjecting it to a bath of water of ammonia, when, if copper is present, the water will assume a blue tinge, more or less intense, according to the amount of copper in the ore. A teaspoonful of pulverised ore dropped into a two ounce vial two-thirds filled with the above mentioned liquid is about the proper proportions to be employed in the test. Nearly all the ores of copper may be readily distinguished, after a little experience, from the appearance of a greenish tint upon their surface, more or less observable, and sometimes verging upon purple or blue.

The ores of copper are divided, by metallurgists, into 13 different classes, and each class is subdivided into many varieties. The richest of the ordinary ores appear under two general aspects: the first having a metallic luster of copper sed, brass yellow, iron or blackish gray, at times inclining to blue; the second is without metallic appearance, of a reddish color, verging upon purple, blue or green, the last being the most usual tint. The classes of ore most frequently occurring are Native Copper, Sulphuret of Copper, Copper Pyrites, Gray Copper, Sulphate of Copper, Carbonate of Copper and Arseniate of Copper. Native Copper, so far as we have learned, has never been found, to any extent in this State, although it occurs in greater or less abundance in most other copper regions hitherto explored. It is found in greatest abundance in the mines on the Southern shore of Lake Superior. The most common ores of copper are sulphurets and oxides the former being the most abundant.

Sulphuret of Copper occurs in all considerable copper districts, and especially in Cornwall. This is also a class of ore which seems to be very abundant in California. The color of this ore is a blackish lead gray, approaching, at times to tarnished blue or green. It is considered one of the richest ores, and generally occurs in very heavy veins.

Copper Pyrites greatly resembles, in appearance, sulphuret of iron, common in the gold bearing quartz of this State, and will probably prove the most abundant of the copper ores on the Pacific Coast. This with the sulphuret of copper, forms the chief yield of the copper mines of Cornwall. The color of the Pyrites is brass yellow, subject to tarnish, with greenish black streak and uneven fracture.

Copper Pyrites are readily distinguished from iron pyrites, which they greatly resemble, by their inferior hardness; they may be cut with a knife, while iron pyrites will strike fire with steel. A marked difference may also be noticed in the effects of nitric acid upon the two substances. They do not form so rich an ore as sulphurets. The richness of the Pyrites may generally be judged by their color. If they

present a fine yellow hue, and readily yield to the hammer, they may be considered a good ore; but if they are hard and of a pale yellow color, they are mixed iron pyrites, and consequently comparatively barren of copper and constitute a poor quality of ore.

Carbonate of Copper is of a blue or light green color, with pale green streak. It often occurs in beautiful green crystals. It is also known as Malachite. Green Malachite or Green Carbonate of Copper admits of a high polish, like marble, and when obtained in large slabs, is often formed into tables, mantel pieces, etc.

Arseniate of Copper is of various shades of olive Green, and sometimes occurs in beautiful blue crystals. It readily melts before the blow-pipe, throwing off fumes of garlic odor. This ore is but little worked.

Gray Copper ore is of a steel gray color, more or less deep, either bright or dull. The value of this ore is often very materially increased by reason of the silver which it contains. It is generally accompanied, to a greater or less extent with copper pyrites.

Sulphate of Copper (Blue Vitriol), is similar to the artificial salt of the laboratory. The water flowing from mines of this variety of ore is of a blue tint, caused by the solution of this salt. Copper is easily obtained from this water, in a metallic state, by depositing pieces of scrap iron in it.

The ores above named are about all the ores of copper which are worked to any extent. The copper of Lake Superior contains about 3-10ths of one per cent of silver. The copper of this State, mostly if not all, doubtless contains an appreciable quantity of both gold and silver. Of this we shall probably receive more definite knowledge when full returns are received from the ores which have been shipped East for reduction. Many of the mines now being explored for copper; have heretofore been worked for gold, and abandoned because they would not pay. As our miners become familiar with the characteristics of copper ores these mines are being rapidly re-located, and worked for their legitimate yield, which, as a general thing, will be found to be much more profitable and enduring, than any ordinary yield of the more precious mineral, so generally sought for in California. A little science will be found of vast importance to the practical miner everywhere, and especially in California, where the mineral deposits assume such a great variety, and are found in such unprecedented profusion. Our miners according to present indications, will soon become as familiar with copper ores, as they have, for the last ten years, been with gold. We shall, from time to time take occasion to throw out such practical hints as may be deemed for the advantage of those engaged either in prospecting for ores, or raising and reducing them.

SAN FRANCISCO PHYSIOLOGICAL SOCIETY.—Articles of incorporation in favor of the San Francisco Physiological Society were filed on Tuesday last, in the office of the County Clerk. This is a benevolent and scientific association which proposes to cultivate the science of human physiology, and to elevate woman to a standard of physiological knowledge corresponding to the advancement of the age.

#### MINING SUITS IN WASHOE.

The Territorial *Enterprise* of Virginia City speaks as follows of the Mining Suits now in progress or contemplated in that neighborhood: "Lawsuits and the rumors of lawsuits have been the talk of operators and the study of lawyers during the past week. The arguing of the Potosi-Chollar case before the Supreme Court, seems to have suggested scores of opportunities for litigation; and any number of injunctions and ejectments loom up in the future. Like a contagion, however, this condition of affairs must soon die out from the want of subjects, or be dissipated by a purer atmosphere, when the real owners of claims will be all the more secure in their possessions for the ordeal of menace and litigation through which they have passed.

Prominent among the approaching suits mentioned, are—the Sacramento and Meredith; the triangular case of the Baltic, Uncle Sam and Sweezy; the re-opening of the North Potosi and Hale & Norcross suit; the Savage vs. the North Potosi; and more remote, but not less certain, the Rogers and El Dorado squabble. The Sacramento sues, to quiet title, near a dozen mining companies on Cedar Hill; but the suit, it is well understood, is aimed at the Meredith, and will find a hearing some time next month. The second case mentioned gives promise of being long and spirited. The Sweezy first located the ground in dispute, the Uncle Sam re-located it, and the Baltic claims title through a Constable's or Sheriff's sale of the ledge for debt. The Sweezy pleads that the claim was never subject to relocation, the Uncle Sam that it was abandoned by the Sweezy and illegally transferred to the Baltic, and the Baltic that the Sweezy did abandon and the Baltic did acquire possession through the sale referred to. The suit between the North Potosi and Hale & Norcross, won not long since by the latter, need not be explained. The Savage now threatens suit for the remainder of the ledge left the Potosi by the Hale & Norcross verdict. The Potosi will endeavor to prove that the ledge it is now working lies in front of the Savage claim. The most interesting case, perhaps, is that of the Rogers and El Dorado—all the more so, as the ledge in dispute is presumed to be of great value. The Rogers stock has found its way, to a great extent, into the hands of heavy operators, but the El Dorado seems sanguine of its ability to place the Rogers stakes three hundred feet west of the Montour ledge and maintain possession of the expensive works now seen on the contested ground.

The Yellow Jacket has also commenced a suit against the Union, Laboring and Princess Companies, to quiet title.

Capitalists wait with some anxiety the decision of the Supreme Court of the Territory, in the suit of the Chollar Company vs Potosi Company, in the event of reversion of judgment, the Potosi would advance to three times its present rates, and an advance may be reasonably looked for in Chollar stock if the judgment of the lower Court receives confirmation.

The value of the ground now pending in the suit between the Chollar and Potosi Companies is variously estimated at from five hundred to one million of dollars.







# MINING AND SCIENTIFIC PRESS.

## SAN FRANCISCO MINING NOTICES.

**RED, WHITE AND BLUE G. & S. M. Co.** levied an assessment of 25 cents per share, payable on or before Feb. 1st, office cor. Pine and Montgomery Sts.

An assessment of \$35 per share was levied Jan 6, payable immediately, at office, No. 712 Montgomery street.

**Iona Copper Mining Company.**—The annual meeting of Stockholders for the election of officers, will be held, Jan. 23, at office, No. 502, Montgomery street.

**Live Oak Copper Co.**—The Annual Meeting of Stockholders for election of Trustees, will be held at Office, in Montgomery Block, Feb. 2, 1863.

**Coso Silver Mining Co.**—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

**Cedar Hill Tunnel and Mining Co.**—An adjourned meeting of Stockholders will be held, Jan. 15, at Office, Room 5, over Parrot's Bank.

**Mina Prieta S. M. Co.**—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

**Savage Mining Co.**—The Annual Meeting of the Stockholders of this Co. will be held at Office, 712, Montgomery St. Jan. 13.

**Union G. & S. M. Co.**—The regular quarterly Meeting will be held, at Office, 410, Montgomery St., Jan. 19.

**The Madison G. & S. M. Co.** advertise names of parties who are in arrears for assessments, and give notice that their stock will be sold on the 29th day of Jan. unless said assessments are previously paid.

**Franco-Americano S. M. Co.**—The following persons were elected officers at the meeting of trustees, Dec. 26th—Chas. F. Gaian, *President* and A. S. Gould, *Secretary*.

The office of this Company has been removed to No. 528, Clay street, Room No. 2.

**Sierra Nevada S. M. Co.**—The annual meeting for the election of Trustees will be held at office No. 40, Montgomery Street, Jan. 12th.

**Lucerne Mining Co.**—The Annual Meeting for the election of Trustees will be held at Office 114, Battery St., Jan. 12th.

**Central Silver Mining Co.**—The Annual Meeting for the election of Trustees will be held Jan. 13, at Office, No. 712, Montgomery street.

**Lady Bryan G. & S. M. Co.**—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

**Desert Mining Co.**—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

**Wide West Mining Co.**—The Secretary of this Company publishes an important notice to Stockholders, in the daily papers.

**Reese River Mining Co.**—Ten cents per share has been levied upon the capital stock of this Company, payable Jan. 14th.

**San Francisco S. M. Co.** have laid an assessment of \$25 per share, payable on or before Jan. 1st, 1863.

**Pacific Quicksilver Mining Co.**—Assessment No. 3, of \$1 per share was levied, Dec. 22, payable immediately.

**Keystone Copper Mining Co.** advertise for proposals to purchase or treat 3d quality copper ore. Proposals received till Jan. 15th.

**Mammoth Ledge Mining Co.** give notice of an assessment levied and payable on or before Jan. 13th. Also that the first annual Meeting for the election of Trustees will be held at office, Jan. 17th.

**Hale & Norcross S. M. Co.** have levied an assessment of \$5 per share payable on or before Jan. 26th.

**CHARLES CANY MINING Co.**—An assessment of \$1 50 per share was levied on the stock of this Company, Dec. 14th, 1862, payable on or before January 14th, 1863, at office, 338 Montgomery St.

**LIVE OAK COPPER MINING Co.**—Office, Montgomery Block—An assessment of thirty cents per share was levied, Dec. 1st, 1862, payable in thirty days.

**NORTH POTOMI SILVER MINING Co.**—An assessment of four dollars per share was levied on this Company, Dec. 11, 1862, payable on or before January 16th, 1863, at office, Cor. Battery & Washington Sts.

**MEREDITH GOLD & SILVER MINING Co.**—An assessment of two and a half dollars per share (five dollars per foot) was levied by this Company, Dec. 11th, payable immediately, at office, 712 Montgomery St.

**BULLION G. & S. M. Co.**—The Stockholders are notified

that they will hear something to their advantage by calling at the office of the Company, cor. Pine and Montgomery Sts.

**NORTON G. & S. M. Co.**—An assessment of two dollars per share was levied Nov. 25, payable on or before Dec. 30th, 1862, at office 522 Montgomery St.

**Dios Padre G. & S. M. Co.**—An assessment of three dollars per share was levied, Nov. 29th, payable on or before Jan. 1st, 1863, at office 502 Montgomery St.

**EMMETT G. & S. M. Co.**—An assessment of twenty-five cents per share was levied, Nov. 21st and is now due, and payable at office 326 Clay St.

**VIBBARD G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office 326 Clay St.

**DOYLE G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office No. 326 Clay St.

**EL DORADO G. & S. M. Co.**—An assessment of one dollar per share was levied, Dec. 1st, and payable at office, on N. E. cor. of California and Montgomery Sts., or to Superintendent in Virginia City.

Another assessment of one dollar per share was levied Dec. 22, payable as above.

**IOWA MINING Co.**—An assessment of Four Dollars per share was levied, Dec. 4th, payable at office 522 Montgomery St. on, or before Jan. 3d, 1863.

**JOSEPHINE MINING Co.**—An assessment of two dollars per share was levied, Nov. 19th, and is now due and payable at office No. 21 Stephenson House.

**BURNSIDE S. M. Co.**—An assessment of one dollar per share was levied, Nov. 17th, payable within 30 days, at office 712 Montgomery St.

**HAWLEY MINING Co.**—An assessment of 50 cents per share was levied, Nov. 15th, payable at once, at office 204 Front St.

**AMERICAN QUICKSILVER MINING Co.**—An assessment of one dollar per share was levied, Dec. 16th, payable at Company's Office, in Petaluma, within 30 days—At the expiration of which time delinquent Stock will be sold.

**NAPOLEON COPPER MINING Co.**—The first annual meeting of this Company will be held at office N. E. corner of Sacramento and Montgomery Sts., on Monday, January 12th 1863, at 8 P. M.

**BURNING MOSCOW S. M. Co.**—An assessment of Two Dollars per share was levied, Nov. 25, for the purpose of defraying expenses of steam pump and machinery now being erected to drain the mine. Prompt payment is requested at the Company's office; corner of Montgomery and Jackson Sts., to Jos. P. Nourse, Sec.

## WASHOE MINING NOTICES.

**Baltic Mining Co.**—Notice is given of an adjourned sale of shares in this Company, to take place on the ground, Jan. 31st.

**Progress G. & S. M. Co.**—An assessment of 20 cents per foot was levied, Dec. 27, 1862, payable forthwith.

**Sweezy Co.**—Washington Ledge.—An assessment of \$10,000 being \$5½ per foot—was levied on the stock of this Company, Dec. 28, payable at the Secretary's Office, Medan Building.

**MINERS' MEETING.**—At a meeting of the shareholders of the Siegel Mining Company, it was resolved that a meeting be called of all the miners of the Siegel Mining District, for the purpose of making laws by which said District may be governed, and that said meeting shall take place on the 15th day of January, 1862, in said Siegel District, in or near a certain place better designated as the Siegel Mining Company's Cabin.

**Caution.**—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

**Ashland Co.**—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

**Eldorado G. & S. M. Co.**—An assessment of one dollar per share was levied, Dec. 31, 1862, payable, Jan. 22, 1863, to the Secretary, at corner of Montgomery and California streets, or to the Superintendent at Virginia City.

**La-Plata Oro Co.**—Gold Hill District.—An assessment of two dollars per share was levied, Dec. 26, payable at once, at Office of the Secretary, Court-house Building, Virginia City.

**Texas Co.**—Tennessee Ledge.—An assessment of 25 cts. per foot was levied, Dec. 22, payable on or before Jan. 21, 1863.

The Regular meeting of the Company for election of officers, will be held at the Comet Saloon, Virginia City, on Saturday, Jan. 21.

The North American Co., Gold Hill, will sell at auction,

Jan. 31, stock of shareholders delinquent in payment of assessments.

**Grass Valley Co.**—A meeting of this Co. will be held the "Medan," in Virginia City, on Thursday, Jan. 15.

**ASHLAND G. & S. M. Co.**—An assessment of fifty cents per share was levied, Dec. 10, payable at the office of M. J. Power, Sec., B. St.

**NORMAN SILVER MINING Co.**—An assessment of One Dollar per share was levied, Nov. 19th, payable on or before Dec. 31st, to the Superintendent in Virginia City, or at the office, No. 40, Montgomery Street, San Francisco.

**MARTIN WHITE MINING COMPANY.**—An assessment of ten cents per foot has been levied, payable to the Secretary, at office on C Street, Virginia City.

**THE SWEENEY Co.** Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

**POORMAN G. & S. M. Co.**—An assessment of Five Dollars per share was levied, Nov. 9th, and another of Ten Dollars per share, Nov. 21, payable at once to the Secretary, R. J. Michel.

**COLEDONIA TUNNEL AND MINING Co.**—An assessment of Thirty-two Dollars per share was levied, Dec. 8th, payable immediately to the Secretary, Martin White.

**THE CHIMNEY ROCK Co.**, lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Bach & Paxton Companies that they are trespassing upon the Chimney Rock Co.'s ground.

**LA CROSSE MINING Co.**—An assessment of \$1 25 per share was levied, Dec. 8th, payable at office 73 C Street, Virginia City.

**HAWK EYE SILVER MINING Co.**—An assessment of 25 cents per foot was levied, Dec. 6th, payable immediately to S. A. Kellogg, Sec. Gold Hill.

**MOHEGAN Co.** Cedar Hill.—An assessment of fifty cents per foot was levied, Dec. 5th, payable forthwith, to the Secretary at Virginia City.

**ORIENTAL G. & S. M. Co.**—The 3d assessment of 15 cents per foot, was levied, Dec. 8th, and is payable at office, No. 31, C Street, Virginia City.

## ESMERALDA MINING NOTICES.

**THE ZENOBIA LOBE COMPANY**, give notice that they claim a superior title to the Johnson Co., claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder,

## MINING AND SCIENTIFIC PRESS.

**THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.**

**THIRD YEAR! VOLUME VI.—NEW SERIES!**

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers.—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

**EWER & SMITH, Publishers,**

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



# Mining and Scientific Press.

W. B. EWER, EDITOR.

MONDAY EVENING.....JANUARY 19, 1863.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, Proprietors.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOGRAPHY and ELECTROTYPE, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates.

PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

In our issue of last week we commented at some length upon the pernicious exaggerations and misstatements which characterize and constitute the late Report of the Land Commissioner to the Secretary of the Interior. That "Report" has been widely circulated by the press of this State, and its "hifalutin" talk placed side by side with the plain facts of our mining growth and production. Nothing could be more cruel. Such balloon like fancies when brought in contact with any reality produces no concussion whatever.

The Commissioner at one time seemed disposed to take Mr. Sargent's excellent advice, to come out to California and see and learn for himself, the nature and condition of our mining interests. We trust he will do so; or at least by another year prove himself to be "a man who reads the papers."

Last week we said "The Commissioner, gravely and unqualifiedly assumes that the yield of the current year will reach \$100,000,000. In another column we have given an accurate report of the shipment of treasure for the year ending Jan. 1st, 1863, which foots up all told only \$42,561,761. This shipment it should be recollected has been made under the unusual stimulus of an extraordinary demand for gold at the East, &c."

Even this does not express the whole truth concerning the product of California. It is an exceedingly slight deviation from the truth to say that all the gold dug in California and all the silver produced in Nevada, quickly comes to San Francisco to be made into bars or coin.

According to the very reliable statistics recently published in the 'Bulletin,' "the receipts of Treasure from the Interior," at San Francisco, during the year 1863, were \$42,539,799. But of this amount \$4,989,921 was coin, and therefore whether the product of this year or not, had been counted once before. The amount uncoined was \$37,549,878, and if from this we deduct the amount which the same paper a few days before stated to be the receipts from Washoe by public conveyance, viz., "about \$5,500,000, we shall arrive at the true yield of this State during the year just passed—\$32,049,878.

In 1853, it was more than \$53,000,000. The mathematical genius of the Commissioner alone can show how long it will take for California to reach his estimate of \$100,000,000, at the same rate of increase.

We need not however go back 8 years. Again we quote from the *Bulletin*, correcting a slip of the pen or type for 1861, in which the receipts from the Northern mines are given as the uncoined treasure and those from the Southern mines as the coined:

Uncoined Treasure Received in San Francisco.

1860.	1861.	1862.
\$37,802,539.	\$35,880,632.	\$37,589,878.

That is, including 5½ millions from Washoe, the receipts of 1862 fall ¼ of a million short of those of 1860, when little or none was received from Washoe.

If this decrease has taken place while the mines are free to all what ought we to expect under any system of taxation whatever?

We believe however that the proposition to tax the mines has received its quietus. Gold at 48 per cent. premium, is the grandest orator addressing the grandest audience in the world—every man in the Union—an orator that will be remembered long after this foolish proposition of taxation has been forever forgotten.

## OUR MINERAL RESOURCES.

The restlessness of the California miner, while, as a general thing it works only disaster to the individual, is exerting a most beneficial effect upon the community at large. It is to this class of our population that the country is mainly indebted for the wonderful development of her mineral resources which has been accomplished within the past three or four years. The Fraser river excitement of 1858 seems to have impressed upon the mind of our mining population the idea that California was not the only portion of our territory, on the Western Slope, which was rich in mineral. Though, to a great extent disappointed in their expectations of the value of the Fraser river mines, the adventurers thither were determined to continue their explorations in other quarters. The result has been a most wonderful development in both the variety and extent of our mineral resources. The new mineral fields developed by these hardy and determined explorers, present an already extensive outlay in Washington Territory, and Oregon, and extend for hundreds of miles along the Eastern Slope of the Sierra Nevada, and far into the interior of the "Great Basin." Large cities and towns have grown up in some of these localities, which, in the marvelousness of their growth, compare favorably with the early cities of California: while the flow of precious metals therefrom forms most important tributaries to the main stream which courses so regularly through the Golden Gate.

The general yield of the placer mines of California is evidently on the wane, and the development of our quartz interest would utterly fail to keep up the monthly shipments to their general average, were it not for the timely supply that is coming to our aid from these new mining districts.

The amount of gold and silver now finding its way to this city from Nevada Territory forms no inconsiderable item in the monthly shipment of treasure to the East; and yet it must be acknowledged by all who have any acquaintance with that region, that the returns as yet are but the small beginnings of the grand total which must soon foot up as the average monthly yield of the Eastern Slope. Patient and careful explorations by experienced miners are still daily enlarging the boundaries of that remarkable mineral region. Far out on the Humboldt, nearly approaching its head waters, within the unexplored borders of Oregon and Washington Territories, the explorers have already pitched their tents and are sending to their friends here and in Washoe the most indubitable evidences of the extraordinary mineral wealth of those distant regions. The evidence is now overwhelming that California forms the mere western edge of a vast mineral field whose area comprises the entire central portion of the North American Continent, and whose natural outlet is through this city.

These extensive developments are the chief causes that have of late years created so much confidence in the increasing growth and prosperity of San Francisco. Just in proportion to the extent of the development of the mineral resources west of the Rocky Mountains, will be the future growth of this metropolis. It is now apparent to even the most casual observer, that the developments and accomplishments of the next decade cannot fail to place San Francisco in the front rank of American cities, while her facilities for acquiring wealth will be without a parallel in the history of the past. Located as we are, apart and at a safe distance from the convulsions, both civil and commercial, of the Atlantic States and Europe, the capitalists of the East are already turning their attention to our mines as a safe and profitable field for investment. Millions of capital from the Atlantic States and Europe are even now at the disposal of agents here for investment. These agents are met everywhere. They are seeking to purchase our copper ore and to invest in our coal mines. They have already made their appearance in the Mining Stock Exchange, and the day is fast approaching when their bids will run up our leading dividend paying Stocks to a figure little dreamed of on Montgomery street to-day.

## COPPER.

New discoveries of copper ores are constantly being reported. The late remarkable developments in Calaveras County, and the promptness with which capitalists are coming forward to encourage operations in this branch of mining, has given a wonderful impulse to this new department of industry. Many that are conversant with the copper developments in the Counties of Calaveras and Mariposa, think that it will not be more than five years ere this new interest will eclipse in value and importance the gold mines of those counties.

Considerable excitement exists in the vicinity of Jackson Amador county, in consequence of new and rich copper discoveries recently made near the Mountain Spring House. The *Dispatch* says the vein is supposed to be the continuation of the Copperopolis and Campo Seco vein, and has been traced for several miles. The Amador *Ledger* says that Dr. Newton's Company were the first to work a copper lead in Amador County, and they are taking out large quantities, for which they receive an advance of \$50 per ton at the mine. Other Companies are being formed, and will soon be at work. The copper range is supposed to be about one mile in width, extending from some place south of Copperopolis, thence through Copperopolis and Campo Seco in Calaveras County, Mountain Springs in Amador County, Michigan Bar and Folsom in Sacramento County, and thence away on up beyond Nevada, in all of which named places copper ore or its indications have been discovered.

J. E. Oliphant has obtained some very fine specimens of copper from a depth of 28 feet below the surface in Montezuma, Tuolumne County, near the Zinc House.

The late discoveries in Nevada County are in progress of development. Another discovery is also reported on McCarty's Ranch, about two miles from Grass Valley. Several discoveries have also been made a short distance below Grass Valley, of which more particular mention will probably soon be made.

Copper has recently been discovered about ten miles from Auburn, and a Company has been formed with the intention of giving it a thorough prospecting. A lead has also been discovered in Green Valley, Placer County, which is reported rich.

Del Norte, Mariposa, Calaveras, Amador, Tuolumne, El Dorado, Nevada and Sacramento Counties are now fairly in the field as copper districts. Developments in other Counties may soon be expected as a necessary result from the attention which is now being turned in that direction.

## TIN.

Tin has been discovered in several localities in this State, and we notice that a Company to be known as the "Orio Gold and Silver Mining Company," was incorporated, in this city, on Wednesday last, to work for tin as well as other valuable metals in Santa Clara County; Daniel Driscoll, A. S. Barclay and C. A. Mathew are the Trustees. The *Herald* in noticing the formation of this Company says: "We have sufficient reasons for believing that the parties composing this Company have a very 'good thing' in the shape of an extensive tin mine, which is situated within a day's drive of this city. It appears that the riches of our glorious State are just beginning to be developed."

## SILVER.

A Los Angeles correspondent of the *Bulletin* gives some wonderful reports of silver discoveries recently made near La Paz. Ophir and Gould & Curry, according to these accounts are entirely eclipsed! It would appear that the apocryphal Indian stories of gold and silver bullets, and nuggets, lying around loose, might yet be proven true. But, as the correspondent remarks if there is any truth in these reports we shall soon hear from them again, in a more definite and reliable manner.

New silver discoveries are still reported in our own vicinity. Reist & Co., proprietors of an extensive quartz mill and a rich vein near Rawhide Ranch, in Tuolumne county, are putting up apparatus for extracting the silver from the ore found in their rock. They have lately ascertained that their rock is nearly as rich in silver as in gold.

According to the Calaveras *Chronicle* of January 3d there was quite an excitement in that place during the latter part of the previous week, caused by the discovery of supposed silver mines in the Blue Mountain Range, some thirty miles east of Mokelumne Hill. The *Chronicle* says:—"The ore assays rich, and quite a number of claims have already been staked off. If the lead proves as good as expected, we



shall have as rich silver lodes in this county as there are in Washoe. The passage of the Corporation Act by the Nevada Territorial Legislature, will induce capitalists to invest in silver leads on this side of the mountains."

The *Mariposa Gazette* pronounces the recently discovered mines in that locality as realities worthy the attention of the community

#### COAL.

It is said that an extensive bed of superior coal has been discovered on Dry Creek, near Folsom. Preparations are being made for its proper development.

#### SULPHUR.

Mr. Wautsman, according to the Territorial *Enterprise* of Virginia City, has brought to that office several specimens of pure sulphur which had been taken from a small mountain of that material, situated about twenty miles west of Unionville. The *Enterprise* adds:—"That locality may be in close proximity to the lake which burneth with fire and brimstone, and it may not—yet we are of the opinion that this item will change the destination of a good many moderate Christians who are now preparing to emigrate to Humboldt. However, it will give the regulars a better chance than they generally have in mining regions."

#### THE "DIMES" AND "WIDE WEST" CONTROVERSY.

Some little excitement has recently been created in Esmeralda mining circles, by reason of an injunction suit brought by the "Dimes" Company against the "Wide West," the former holding the extension of the latter. The facts in the case we believe are substantially as follows:—The "Wide West" and "Johnson Co.," now consolidated, own a controlling interest in the "Dimes" Company; the stock so held standing in the name of T. W. Ly'e. The minority of the "Dimes" property holders desire a division of the property, and to that end have brought a suit, and obtained an injunction against the working of the "Dimes" ground. The "Wide West" Company are not working upon that ground, and for the present, at least, do not desire to do so. They are confining their operations to their own original ground. It appears that an effort is being made to mystify the true character of the controversy, and thus depreciate the "Dimes" stock for speculation.

We have just examined, at the office of Thomas Ogg Shaw, 422 Montgomery street, some very rich specimens of gold quartz, taken from the Copper Hill Lead, Sierra county, Nevada Territory.

### GENERAL MINING STOCK REPORT.

SAN FRANCISCO, Jan. 19th, 1863.

#### STOCK REMARKS.

The business of the past week, although very considerable, does not equal in amount that of the week previous. The increase of business for the two weeks past may be attributed, to some extent, to orders from abroad for agents here to invest in well established mines.

Ophir has declined \$200 during the week, with no apparent cause. The accounts from the mine to date, fully confirm the favorable reports of last week; the "rich strike" north of the Mexican is now known to be a reality and more very rich ore in a gallery, just opened, is reported.

Gould and Curry has advanced another hundred during the past week, and appears to be the favorite in the market. Sales of the January dividend have been made as high as \$81 per foot, and \$100 is confidently expected by many of its friends, after the present month. Twenty of the forty stamps are now in operation, and the other twenty will probably be started to-morrow or day after.

Savage is still improving. It is quick in the market, and shares are freely taken when offered at anything near the market price. Sanborn & Co. place it among the first class, and quote a sale at \$1,010, although the general range of this stock, during the week has been from \$60 to \$90 dollars.

Hale & Norcross has not been much in demand, during the week. It is held firm at \$125 to \$130.

Chollar has not been as active as last week. It started on Monday, at the Board at \$410, and fully maintained its stand during the week. The delay in the decision of its suit with the Potosi, renders bidders a little shy. This decision is anxiously looked for.

Potosi is still advancing. On Friday and Saturday it stood at the Board at an advance of from 25 to 30 over the last week.

Burning Moscow, as indicated last week has materially advanced—from 10 dollars to the foot. It is now quoted at \$87½. Further advances are anticipated.

Sierra Nevada declined somewhat at the close of the week, in consequence of an assessment of \$15 per foot being levied by the Company, on Thursday last. The depreciation was about equal to the assessment. Considerable stock has changed hands during the week.

Norton which has been very quiet for several weeks and scarcely quoted at all, took a sudden start this week in consequence of the report that the Company "had struck it rich," going up from \$14 on Monday to \$34½. It is said that the Company have struck very good rock in their lower tunnel, at

depth of 200 feet from the surface—thus fully establishing the permanency of their mine.

The Dancy, which was not heard from the week previous, had buyers, last week, at from 100 to 200 dollars. Their due mill, it is expected will go into operation about the 1st of February.

Iowa is quoted the past week at from \$110 to \$120—Very little done

#### ESMERALDA STOCKS.

Esmeralda Stocks appear to be attracting much more attention in this market than formerly. We would call attention to the notice in another column of the Mining Stock Board recently established there, and to the stock transactions reported in their appropriate place. This report it will be noticed is somewhat ancient—but is the latest which has come to hand at this office. Our friends of the "Star" have neglected us the past week.

Wide West still continues a live institution and is rapidly advancing to the rank of a first class mine. It has improved from 40 to 50 dollars the past week and now stands firm at \$400. The Company are taking out from four to five thousand dollars a week, at the present time, from a very small, inefficient mill. This stock will doubtless continue to advance rapidly for some time to come.

The Antelope has also made a large advance, fully 50 per cent on its last week's rates. It is now quite firm at from \$200 to \$215.

#### REPORT OF SALES At the San Francisco Mining Stock Board, For the week ending January 17, 1863.

Names of Companies.	Total No. Shrs.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Ophir	16,800	12	\$300	2600	2600	2500	2450	2200	2300
Gould & Curry	4,800	4	\$500	2950	—	—	2900	2950	—
Central	1,800	12	300	—	1450	1500	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	5,600	* 300	410	400	390	400	—	—	—
Potosi	4,400	1	400	—	105	130	130	140	140
Hale & Norcross	8 0	2	500	—	—	—	515	520	—
Sierra Nevada	5,800	4	300	62½	70	80	50	55	60
Dancy	2,800	2	500	190	175	190	—	—	—
Burning Moscow	4,800	2	100	62½	67	75	87½	87½	—
North Potosi	3,600	1	800	—	6	8	8	13	16
Rogers, F. D.	2,000	1	250	15	15	15	—	10	10
Meredith	7,200	2	125	—	24	—	—	—	25
Charles Caney	1,800	1	30	—	—	—	18	19	—
Sacramento	1,800	—	500	—	—	28	30	—	—
Lucerne	10,000	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	—	—	—	850	800	900	875	875	—
Norton	—	—	—	14	—	20	21	31	34½
Cedar Hill Tunnel	—	—	—	—	—	—	—	2	3
Mount Davidson	10,000	3	200	4½	—	4	4½	—	4
Wide West	8,600	4	60	415	375	380	350	370	395
Antelope	1,200	1	500	200	210	250	225	200	—
Esmeralda	1,800	1	1000	50	45	80	57½	57½	55
Real Del Monte	4,400	1	400	27½	28	22½	22½	22	22
Etna	1,200	1	100	5	5	6	6	5	5
Utah	—	—	—	22½	24	—	25	25	30
Silver Hill	—	—	—	25	29	23	22	—	22

\* 4 shares to 1 foot.

§ New Stock.

#### Coso Stocks.

The Josephine changed hands at the Stock Board, on Monday and Tuesday at 15 dollars, on Wednesday and Thursday at 16, on Friday at 14.

Coso—changed hands on Wednesday at 8½ dollars and on Thursday advanced to 16. It was quoted at 12 dollars on Friday.

Willow Springs—15 shares sold on Monday at \$35, and 5 on Wednesday at \$40. Holders generally asking \$45.

#### Mexican Mines.

Mina Prieta finds no recent buyers, but is held at \$140.

Dios Padre was quoted on Monday a 25 dollars, on Tuesday at 43, on Thursday at 30. Not quoted on Friday or Saturday.

#### TRANSACTIONS IN SHARES. \*

Ophir—24 shares at \$2,650 per foot; 60 at \$2,750, 60 days; 12 at \$2,500; 36 at \$2,550, 120 at \$2,600; 72 at \$2,700.

Gould & Curry—10 at \$3,100; 12 at \$3,100; 20 at \$3,000, 60 at \$3,000; 24 at \$3,000; 8 40 at \$2,950.

Chollar—20 at \$415; 20 at \$415; 1 2 at 405.

Savage—5 at \$850; 5 at \$835; 11 at \$910; 30 at \$1010.

Potosi—20 shares at \$130.

Sierra Nevada—20 at \$65; 10 at \$60; 2 at \$45; 20 at \$55; 10 at \$57½; 50 at \$54; 20 at \$60; 15 at \$52½.

Burning Moscow—16 at \$70; 30 at \$72½; 10 at 78; 30 at \$80; 20 at \$80 86 at \$85; 60 at \$85; 60 at \$87½.

Charles Caney—20 at \$18; 43 at \$18; 40 at \$19.

Meredith—20 shares at \$25.

Central—24 at \$1,500; 12 at \$1,600.

Hale & Norcross—8 at \$425; 50 at \$520.

Dancy—50 at \$200. North Potosi—3 at \$6; 16 at \$6.

Rogers, F. D.—60 at \$10; 25 at \$15.

Norton—50 at \$23; 36 at 20; 30 at 26; 15 at 29, 40 at 30; 25 at 32; 20 at 35.

#### ESMERALDA DISTRICT.

Wide West—45 shares at \$405; 20 at \$410; 25 at \$390; 20 at \$415.

Antelope—50 at \$222½; 20 at \$225; 10 at \$250; 10 at \$200; 25 at \$216; 10 at \$220.

Real del Monte—15 at 28; 30 at 25; 50 at 26; 10 at 24.

Silver Hill—15 \$28; 10 25; 40 at 24.

Etna—50 at \$5.

\* Quotations made at given rates per foot.

#### ESMERALDA STOCK REPORT.

At the first meeting of the Esmeralda Stock Board, held January 2nd, 1863, the following business was transacted in stocks, as reported in the Esmeralda Star.

Wide West—new stock—25 feet offered at \$400; bid 350 on 90 days.

Antelope—50 feet offered at \$150; bid 125 on 60 days.

Utah—25 feet offered at \$50; bid 40 on 90 days.

Rodie Bluff Consolidation—50 feet offered at \$10; bid 6, cash.

Ural—10 feet offered at \$250; bid 200, on 30 days.

Etna 40 feet offered at \$5; bid 3 50, cash.

Mount Bruley—30 shares offered at \$25; no bid reported.

Peru (two feet to the share)—25 shares offered at \$8; no bidders.

Garibaldi—10 shares offered at \$20; bid 20, cash.

Heath—offered at \$10; no bidders.

Falls of Clyde—100 shares offered at \$5; no bidders.

Old Winnemucca—30 feet offered at \$10; no bidders.

St. Louis—\$12 bid; no stock offered.

Hanover—20 shares offered at \$25; bid 12.

Live Yankee—25 shares offered at \$10; bid 8.

Nevada—25 shares offered at \$10; no bidders.

Del Monte—12 shares offered at \$20; bid 15.

#### WASHOE STOCK REPORT.

[Compiled from THE DAILY TERRITORIAL ENTERPRISE.]

Monday, Jan. 5th.—Mining operations are still being carried on with quite as much vigor as at any previous time during the season. The weather has thus far been extremely favorable for winter operations.

The Duna Company's ground still continues to present favorable appearances, and can be sold at low rates. The indications are that the ledge improves with its depth. The Siola Company expect to reach their ledge soon, with their tunnel, which will strike it at a depth of 160 feet. The stock of this Company is chiefly held by the original locators. The Union Company have lately had about 50 tons of their rock crushed, which, though not rich, gives encouragement for further prospecting, the mine evidently improving with its depth. Stock in demand at low figures. Hazel Green and Dargun are quiet in the market.

The Lafayette Company, Gold Hill District, the chief part of whose stock recently passed into the hands of San Francisco capitalists, presents favorable indications. It is believed the enterprise will prove a paying one. Twenty feet of the Bloomingdale gold, to-day, for \$4 per foot. Birdsal has been acquired for at \$20. Twenty feet of Baltic sold for \$17 per foot.

Tuesday, January 6th.—The Summit District is beginning to attract some attention among miners who are willing to engage in prospecting the various leads in that locality. The Flowery Hill Company have struck some very rich rock in their ledge near the surface. They are now engaged in running a tunnel, to strike their ground at a depth of fifty feet. Several transfers have taken place in this District to-day; particulars not given.

Accounts from Palmyra continue favorable to the success of the mines in that District. Flowery diggings are not generally in demand. Claims in this locality are looked upon by those seeking to invest, with a shade of suspicion, as to their permanency; the developments, thus far, having proved unfavorable for the future success of these mines. There are several, however, which have been found rich at the surface, but which have not yet been proven at a sufficient depth to determine their real value.

But few claims in the Devil's Gate District are esteemed of much value. The Pride of the West may be set down as the only claim in this locality which is being successfully worked, or promises fair for future prosperity. The stock of this Company does not appear in the market.

Buchanan is salable at \$60 per foot. Ashland is without buyers at \$10. Zouave is offered at \$8. Union is offered at \$10, with no demand; Hazel Green at 5, and no sales, and Oriental is offered at 4. Operations for the day limited and sales unimportant.

Wednesday, Jan. 7th.—No sales of importance quoted. El Dorado is reported at \$60; Utah at 45; Santa Rita at 35; Zouave at 7; Gov. Nye at 6; Madison at 25; Fairview at 20. Cedar Hill Tunnel at 450; Baltic at 20; Hazel Green at 5 and U. S. Tunnel at 750 dollars per quarter share.

Thursday Jan. 8th.—Little business, of note, was done in stocks to-day. It is a gratifying fact, however, that the limited number of transfers during the past week, is due more to a disposition on the part of the holders to wait for an advance of prices, than any reluctance to invest on the part of capital. The members of the Sacramento Company were somewhat elated, to-day, by receiving the returns of some ore from their mine, crushed in this city, at Bradshaw & Co's Reduction Works. The result of the crushing was \$1,113 42 in gold, and \$40 57 in silver. (We gave the item in our last issue.) Such a handsome return of ores from a second rate lode in the Territory, remarks the "Enterprise," is extremely gratifying, and affords additional evidence of the almost incalculable mineral resources of our gold and silver mines.

Friday, Jan. 9th.—A small lot of Palmyra stock has been presented in this market, at prices which would no doubt be esteemed low by those conversant with these claims; but, as yet, there is no especial demand for stock in that district. Some activity is manifested in La Crosse, whether from any new developments made in the claims, or the small demand for the stock, is not reported. Several transactions, it is said, have been perfected to-day, at prices above the usual rates.

Ashland is offered at \$10, Madison at 20, Burning Moscow at 65, Sierra Nevada at 65 and Santa Rita at 40. 16 is offered for Birdsal and 17 50 asked. Hazel Green and Oriental are offered at low rates without sales.

Saturday, Jan. 10th.—The stock trade has been rather brisk to-day, although no very important business has been reported. Eighteen feet of the Oriental sold for \$3 50; 30 shares Cedar Hill Tunnel 4 50; 15 feet of El Dorado, thirty days, 70; 10 feet Birdsal at 17. Some Gold Hill ground changed hands, but the figures are not reported. Madison is quoted at \$25, Peach-Paxton at 35, Baltic at 19, Zouave at 8, Hazel Green at 4 50, Geller at 6, Burnside at 10, Fairview at 20 and Sacramento at from 35 to 40 dollars.

#### HUMBOLDT STOCK.

Considerable Humboldt stock continues in market, but aside from the Mars, Cuba, Sheba, South Extension of the Sheba, and three or four other claims, there is little or no inquiry in that direction. There is also a large quantity of Eagle and Silver Mountain district stock, but entirely without buyers.

The following stocks, not enumerated above, are in the market in Virginia City, and held at the figures annexed:—

Santa Fe	25 00	Summit	55 00
Empire	25 00	Washington Leds	6 00
Milton	25 00	Milton	00 00
McBee	10 00	Laboring	17 50
Belvidere	00 00	Swezy	00 00
Taylor	4 50	Caledonia	10 00
Dargun	00 00	St. George	4 00
El Dorado	00 00		



**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and *four dollars*, or *two dollars* for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

**ONE YEAR'S TREASURE EXPORTS.**—The shipments of treasure from San Francisco, during the year just closed, were as follows:

To New York.....	\$26,194,034 93
" England.....	12,950,139 61
" China.....	2,660,755 29
" Japan.....	17,916 00
" Manila.....	65,651 64
" Australia.....	121 10
" East Indies.....	62,414 00
" Panama.....	434,507 79
" Hawaiian Islands.....	3,000 00
" Punta Arenas, C. A.....	10,000 00
" Mexico.....	5,000 00
" Victoria.....	188,221 71
Total.....	\$42,561,761 07

**DRAWN OFF.**—The California Stage Company have ceased running their stages on the Henness Pass route for the winter. Cause—the almost suspension of travel to Washoe at this season of the year.

Astronomical observations were first made at Babylon.

**RECENT PATENTS**—Granted to CALIFORNIA INVENTORS through the Pacific Patent Agency.

**HERMAN CAMP**,—Patent for Quartz Crusher and Amalgamator.

**W. H. RICHARDSON**—Patent granted for *Washing Machine*.

**E. E. MATTESON**, Nevada: *Hydraulic Derrick*. This invention has been illustrated in this journal, and has obtained great celebrity throughout the State.

**ELANDER HEATH**, San Francisco: *Spiral Spice and Sage Mill*. See "Mining and Scientific Press," June 9th, 1862, Vol. V., No. XIII.

**G. F. DEETKEN**, formerly of Nevada: *Apparatus for separating Gold from Pyrites*. This is one of the most useful inventions of the day. Mr. Deetken has successfully worked sulphurets for a number of years in Nevada county, professes to have obtained greater results than others engaged in the same occupation. Mr. D. has recently established himself in this County, on the San Bruno Road, near the Islais Creek, where he has erected chemical and metallurgical works.

**C. W. THOMAS**, Plaining Mill, California street, facing the Mission R. R. Depot. San Francisco. m1

**TURNER, MARSH & OSGOOD**, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts. m1

**D. R. J. BEERS**—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner. ap16

**KELLY & WADE**, Importers and Dealers in Paints, Oils, Turpentine, Etc. Nos. 105 & 107 California street, Bet. Davis and Front. m16

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual lost was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

## For parting silver from gold when gold

is below 300-1000ths. fine.....3cts per oz.  
" from 300-1000ths. to 750-1000ths fine. 7cts " "  
" " 750-1000ths to 950-1000ths " 14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
301 " 500, 7cts, " " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARs SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

## CORNS AND BUNIONS REMOVED.

**DR. BYRON C. KENNEDY**, practical CHIROPDIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skillful and scientific Professors of Philadelphia, and having made this branch of surgical science my speciality for nine years, enables me to operate skillfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can recommend you with confidence to the citizens of San Francisco, as one of the best persons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field or your exertions in the new and growing city of the Pacific.

## THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hackneyed course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone;" "I was blind and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonably.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.



## Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

PACIFIC PATENT AGENCY. . . . J. SILVERSMITH,  
SOLICITOR.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA  
Connecting via the Panama Railroad with the steamers of the Atlantic  
and Pacific Steamship Company, at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of January, 1893.

Jan. 10th—St. LOUIS, Captain E. S. Farnsworth,

21st—GOLDEN AGE, W. H. Hudson, Commander.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,  
and connect, via Panama Railroad, at Aspinwall, with steamships for N. York

For freight or passage, apply to

A. B. FORBES, Agent.

Corner of Sacramento and Leidesdorff sts.

## LATEST IMPROVEMENT

in LADIES' BUCKLES.

F. REICHEL RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at our address,

FREDERIK REICHEL,

Manufacturing Jeweler,  
620 Merchant street, San Francisco.

## REMOVAL.

OFFICE OF THE PACIFIC METALLURGICAL WORKS  
has removed to 318 California street. Having enlarged our Works at  
the Beach, we are now enabled to reduce from 10 to 15 tons of Silver or  
gold rock per day.

Sold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings  
purchased or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments.

S. C. BRADSHAW, Agent,  
318 California street, near Sansome, up stairs.

## WRIGHT'S PICKS.

WRIGHT'S PUNCH PICK

JOHN WRIGHT, of Sacramento, has established himself in San Francisco  
for the manufacture of every description of PICKS, of the best material,  
reduced prices. Pick Picks of the best iron furnished in any quantity, at  
reduced rates. Orders from the country promptly attended to. N. B.—None  
genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.

## LABOR-SAVING

## Rock Drilling Machines.

TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRY-  
men. The subscriber, Patentee and Agent for GARDNER'S PATENTS,  
continues to receive orders for

HAND, HORSE, AND

## TEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Gallies,  
etc., etc., one man performing the labor of three in the ordinary way.  
FOUR-HORSE POWER MACHINE, operated by one man, drives a ma-  
chine capable of drilling a four to six inch diameter hole in granite four feet  
deep, and in hard limestone, six feet per hour—the rapidity of the work  
being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the  
machine, and its entire success in reducing the cost of drilling holes to one-  
tenth of the former expense, and on a rock excavation of any extent, from  
ten to seventy-five per cent. on the entire work. Responsible parties who  
have rock excavations to make in any part of the State, the subscriber will  
undertake and guarantee to perform the work required, at a saving of at  
least twenty-five per cent. over any other process.

Address orders to  
WM. W. DUNN,  
Fremont street, bet. Market and Mission, San Francisco.

## A. ROMAN &amp; CO.

WHOLESALE AND RETAIL

## BOOK ESTABLISHMENT.

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular  
Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.  
Manual of Metallurgy, more particularly of the precious metals; but includ-  
ing such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of  
the Mine Agent and Smelter. By James Phillips and John Darlington.

Pigot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Philip Overman.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters,

Practical Assaying, by Michell.

Silver Ores and Silver Mines, by Pro. Blake.

Cro's Dictionary of Arts, Manufactures and Mines.

Wolbach's Mechanics of Machinery and Engineering.

Saville's Hydraulic Formula Tables.

Pressing's Chemical Analysis.

Together with many other works in this & similar lines

Books imported to order on short notice.

## A. ROMAN &amp; CO.,

417 & 419 Montgomery Street.

## Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS. OR  
manufacturers of Horticultural Implements, are referred to the above  
invention. For description and engraving see MINING AND SCIENTIFIC PRESS  
No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentee.)  
sep1-3m San Francisco.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache  
bekannt sind, können ihre Mittheilungen in der deutschen  
Sprache machen

Skizzen von Erfindungen mit kurzen, deutlich gezeichneten  
Beschreibungen beliebe man zu adressiren an.

JUL. SILVERSMITH, Federal Building, Room 23.

## RASCHE &amp; SONS,

131 Montgomery street, bet. Bush and Sutter,  
SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

PIANOS, SHEET MUSIC  
ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;

T. GILBERT, Boston;

C. MEYER, Philadelphia.

Whose Pianos they have always on hand, for sale and to rent.

## PIANOS FOR RENT.

New Music received by every steamer. New Music pub-  
lished. Music assorted and bound in the best style. A lib-  
eral discount made to the trade and professors of music.

## MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise,  
Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c., &c.

Light's New Patent Insulated Iron Frame is put into all of

Light's & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST  
In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to  
their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,

FROM THE CELEBRATED MANUFACTORY OF

## MASON &amp; HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

A. KOHLER, Agent.

## Dr. Van Zandt,

Consulting Physician and Surgeon,

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practi-  
cal Medicine.

The Mysterious Problem of Material Nature, Electricity!  
Made Subservient for the Cure of all Nervous  
and Spinal Diseases.

THAT THIS PRINCIPLE, successfully applied to diseased states  
of the system, is to prove a great strength, long wanting  
by physicians, to aid their medicines in overcoming organic and functional  
derangements of the human body. It is a part of the great principle of vitality  
known as nervous influence and necessarily must have much to do in  
obviating diseased action.

## Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equi-  
librium of the ELECTRIC principle; and should this secret and hidden equi-  
poise of health be broken or lowered—should the body be negatively electri-  
fied when it should be positively charged—is not the current broken, and  
is there not a war of forces going on in our system? This needs correcting,  
and in order that the tissues of the body should be susceptible to remedial  
agents we must first restore and

## Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly  
in this great magnetic or electrical intensity of the earth, with its influence  
upon our bodies in health and disease, I am led to take advantage of the  
press, through which to awaken attention to the subject, that good may  
come to all.

## No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life  
blood, render the stomach, liver, heart, kidney and all the natural func-  
tions active by ELECTRICAL excitation, and at once the aged, the palsied,  
the nervous, the dispirited, the melancholic, the dyspeptic and the invalid  
revive under its benign influence.

## To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and  
office practice, is owing to his correct views of the origin of all their mal-  
adies. Ladies can consult him with entire confidence, as he is no speculator  
upon human ills—but is proving himself the only member of the legitimate  
profession in California who is really successful in removing those ills which  
are the peculiar province of the sex. His high appreciation of their deli-  
cately attuned nervous organism, together with their great sympathetic  
life, renders him doubly able to assuage those silent complaints which  
they bear so patiently and so long. No social disquietude need longer af-  
flict our home circles; for he can arouse the stricken energies; restore the  
wonted tonic of the body; awaken the melancholic and desponding; ar-  
rest those drains which cause so much anxiety; cure those protean mal-  
adies which have so long

## Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at  
the stomach, wandering pains, wasting away of strength; extreme debility  
and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that  
general depression of life's powers, which go to render her life a misery  
and death a boon. Dr. Van Zandt, with his new method of exciting the  
Electro-Galvanic current, together with his remedial measures which are  
adapted to the necessities of California, will assure you of a complete and  
radical recovery of all bodily and mental infirmities, and will restore you  
to usefulness, and spare you a blessing to your family and to society.

## All the World Over

wherever disease exists, whether special to the soil and climate or com-  
mon to all regions—epidemic or casual, acute or chronic, contagious or non-  
contagious—it is as necessary to restore the ELECTRO-GALVANIC equilib-  
rium, especially in California, as it is to give food to the starving. This state-  
ment is based upon a series of facts extending through many years, and  
verified by hundreds of patients; so that no principle of science, no rule of  
experience, no result of any well known cause, rests upon more sure and  
unassailable foundations, than those which underlie the world-wide reputa-  
tion of Electricity for the cure of all nervous states of the body, faulty di-  
gestion, mental and physical debility or prostration, coughs, asthma, wan-  
dering pains of a rheumatic, gouty or mercurial character, and all forms of  
disease, the result of scrofula or coarctate habit of body.

## None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—  
melancholy which you cannot shake off—loss of power which you cannot re-  
gain—depression of spirits which weigh you down—wakefulness that knows  
no sleeping—business that languishes for want of energy—a void which no  
society can fill—suspicion which no assurance can allay—Go to Dr. Van  
Zandt, for his cure, and the safety with which he administers his  
new method of Electrical excitation, together with his remedies, which are  
adapted to the requirements of climate and constitution, will assure you a  
radical removal of all bodily and mental infirmities, within the scope of  
science and man to remove.

## The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt  
has made these afflictions an especial study, and that he is the only Sur-  
geon on our State, who has a diploma for that branch of practice. Very  
many of the eye and ear troubles are purely deranged nervous actions, and  
are cured by his electro-galvanic battery—as amaurosis, squinting, catar-  
act, floating specks before vision, twitching of the eyelids, nervous deafness,  
roaring and buzzing noises in the ears, giddiness, etc. All operations suc-  
cessfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29—3m

## FREDERICK KESMODEL,

Cutler and Surgical Instrument Maker

817 KEARNY STREET,

Between Jackson and Washington streets,  
SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September,  
1893, also in Sacramento in 1891 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one in-  
terested, is called to his new method of fitting and adapting Trusses to the  
different cases. It is a well known fact that there has as yet been no system  
of fitting Trusses. There are many different styles which have proven good  
in many cases, but they are all uncertain and cannot be relied on, and in  
severe cases are altogether useless. The following are some of the advan-  
tages I claim for these trusses above any and all others: First—The Pad is  
formed on the parts to be compressed by taking a plaster cast. Second—  
Having a correct model, it enables me to make the Pad of any desirable  
material, such as horn, ivory, etc. Third—The Pad is so adjusted to the  
spring that no movement of the body will move or displace it. There are  
many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL,  
Inventor and Patentee.

ap3 tf



## The Occidental Hotel

IS NOW  
Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a news stand and large Cabinet for minerals; also, a Branch Telegraph Office connecting with all the lines throughout the country.

LEWIS LELAND & CO.,  
Proprietors.  
San Francisco, Jan. 1st, 1863.

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as MINING SUPERINTENDENT in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past year and a half. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assorter of Copper Ore. He can give ample testimonies as to his capacity for the position he seeks.

Apply at this Office.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco. Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency. The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,  
No. 15 Naglee's Building.  
Lithographic Maps can be seen and had at the above named office. no 13 6mo

## V. SQUARZA'S Punch Factory.

MR. SQUARZA IS FAVORABLY known in this State for his Anti-Divorce Liqueur and similar productions, as manufactured by him. We may mention that Mr. Squarza is as fair in the chemical distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants. The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,
Cognac do.	Whisky do.
Arac do.	Kirschwasser do.
Anti-Divorce Punch,	Cocoa do.
Coffee do.	
Tea do.	Morning Comfort,
Pineapple do.	Kummel,
Anisette,	Brandi Cocktail,
Kirschwasser,	Anti-Dyspepsia Bitters,
Appetiser,	Ladies' Trars,

And CHAMPAGNES of all brands.

## WASHOE

## Stock Exchange,

N. E. cor. Montgomery & Merchant sts.,  
SAN FRANCISCO.

L. W. NEWELL & CO.,

Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.

## PHILADELPHIA BREWERY,

Second St. corner of Folsom, SAN FRANCISCO

Holscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

Nov 9

## FULTON FOUNDRY & IRON WORKS.

HINCKLEY & CO.,

MANUFACTURERS OF STEAM ENGINES,

Quartz, Flour and Saw Mills; Cast Iron Fronts for Buildings, Mining Pumps, and all kinds of Machinery Amalgamators, Etc.

Nos. 47 & 49 First Street,

Between Market and Mission, San Francisco.

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to Iron when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.

D. B. Hinckley, Wm. E. Worth. Wm. A. Field.

## DONAHUE'S

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Rollers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost. PETER DONAHUE.

## LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal. LEWIS COFFEY J. N. RISDON.

PALMER, HANSCOMB & CO.,

GOLDEN STATE FOUNDRY  
AND MACHINE WORKS.

First Street, near Market, San Francisco.

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications. Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast. San Francisco, November 29, 1862. 3m

## GREAT REDUCTION

IN PRICES.

STANFORD BROTHERS,

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

## TO OWNERS OF WATER-POWER

Beth's Hydraulic Pressure Wheel.

THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 200,) and to any kind of machinery, will Save in Transportation Material and Labor, from 25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED.

Jan 19-1f

## Holiday Presents!

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

BRAVERMAN & LEVY'S,

621 Washington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. Also,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY,

Dec 29 1m

No. 621 Washington Street, Facing Maguire's Opera House.

LEANDER RANSOM,

Civil Engineer

AND

SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years. OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,

Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## For Sale Cheap!

A HORIZONTAL STEAM ENGINE OF 4-Horse Power, Flue Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,  
Federal Building, cor. Battery and Washington Sts. Room, No. 23.

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c., COUPLING JOINTS of ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."

F. G. BEPLER,

Practical Coppersmith

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery, SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants, and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work. All orders from the country promptly attended to.

## DEETKEN'S

Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 20 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov-8m

## SQUARZA'S PUNCH.

HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff St., near Sacramento.  
Branch at 406 Montgomery street. my 30

JULIUS SILVERSMITH,

Commissioner for Nevada Territory,

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

JAMES PHELAN;

(LATE J. & M. PHELAN.)

IMPORTER AND JOBBER,

Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited  
TERMS LIBERAL. Jan. 1-1f.

THEODOR KALLENBERG,

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. No. 4 Sansome street, corner Market, (a 7.3m) San Francisco.

DEVORE & COS.'

STEAM ENGINE

—AND—

MACHINE WORKS,

Corner Market & Fremont streets,

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILLS, Irons, Flour Mills, Quartz Mill etc., etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING and SCREW-BOLT Cutting AGRICULTURAL MACHINERY made and repaired. Duplicate parts of Threshing and Reaping Machines and Threshing Teeth made to order on the most reasonable terms. Steam Engines and Boilers constantly on hand, and for sale cheap. Screw-Cutting and Turn Lathes for sale. DEVORE & CO





A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, MONDAY, JANUARY 26, 1863.

NO. 13.

#### MINERAL PRODUCTS OF GREAT BRITAIN.

The statistics of the mineral produce of Great Britain, for the year 1861, are given in detail in a late issue of the *London Mining Journal*, from which we condense as follows:

MINERALS.	QUANTITY IN TONS.	VALUE.
Tin .....	11,640	\$ 3,482,768.
Copper .....	531,487	6,850,632.
Lead .....	90,696	5,453,992.
Silver ore .....	29	7,060.
Zinc Ore .....	15,770	149,340.
Pyrites .....	125,135	382,632.
Arsenic .....	1,450	52,208.
Antimony .....	15	216.
Manganese .....	925	14,040.
Nikel, Ochre and Wolfram .....	3,037	14,728.
Iron Ore .....	7,215,518	11,051,380.
Coals (sold and used) .....	83,635,214	100,362,262.
Other Minerals .....	2,222,602	4,224,688.

Total value of minerals produced in 1861, \$132,045,936.

The above, it will be observed, is the amount and value of mineral ores produced, exclusive of gold. We give below the amount and value of metals obtained from the ores.

Tin .....	Tons	7,450	\$4,371,656.
Copper .....	15,331	7,546,464.	
Lead .....	65,643	6,937,224.	
Silver .....	Ounces	569,530	691,972.
Zinc .....	Tons	4,415	379,784.
Iron, Pig .....		3,712,390	44,548,680.

Total value of the above \$66,476,780.  
Gold yield..... 51,916.  
Estimated value of other metals..... 1,202,400.  
Value of coals—83,635,214 tons..... 100,362,252.

Total value of metals produced, and coals. \$168,012,348.

For the purpose of enabling the reader to readily institute a comparison between the mineral yields of the two countries we here append a table of the

MINERAL PRODUCTS OF THE UNITED STATES FOR 1859, compiled from the last census Report. It will be seen, on comparison, that the United States produce about two-thirds as much, in mineral value, as Great Britain. We compare the yield of 1859 with that of 1860 in Great Britain. There is every reason to believe that another decade will place the mineral yield of the United States on a par with that of England, and all her colonies added. The yield for 1859 is as follows:—

Gold .....	\$47,744,462
Silver .....	610,010
Quicksilver .....	2,000,000
Copper .....	3,316,516
Iron .....	19,487,790
Zinc .....	72,600
Lead .....	977,281
Nickel .....	28,176
Coal .....	91,365,765
Coal Oil .....	1,092,450
Salt .....	2,265,302

Total.....\$97,659,252

The production of silver in the United States has largely increased since the census was taken, as the working of the Washoe mines commenced about that time.

The great wealth and power of both nations lies in their immense mines of iron and coal. In the former, it will be seen that we as yet produce only three-sevenths of the amount produced by England. Of the latter we produce only one-fifth as much. In the comparative richness, variety and extent of mineral territory and resources, we infinitely excel Great Britain.

We further condense from the *London Mining Journal* the following

#### REMARKS.

**GOLD.**—The returns above given for 1861, contain the first actual report of gold from a British mine. This gold, 2,784 ounces, was obtained from one of the quartz lodes in Dolyelly, Mirionethshire. The natural consequence of this gold discovery has been the formation of several Companies to work other lodes of a similar character in North Wales, in the progress of which considerable interest is felt among British mining circles.

**SILVER.**—The silver, which appears in the above exhibit is nearly all obtained from the lead produced by the mines within the kingdom.

**COPPER.**—The production of copper for 1861 shows a decrease to the amount of \$683,548 from the product of 1860. But there was not as much exported in 1861 as there was the previous year. In addition to the amount of \$7,546,464 in values of copper produced, as per above exhibit, there was smelted of foreign and colonial ores an amount valued at \$7,672,440.

**TIN.**—The quantity of tin ore produced in 1861 was some what larger than that of 1860, but about the same with the yield of 1859. The demand of this metal for the American market is reported as having greatly fallen off during the past year. The export of tin plate to the United States in 1860 was about \$5,000,000 in value. In 1861 it was only \$2,472,912. This falling off in the demand for tin led to a very material reduction in its price in the English market.

**LEAD.**—The product of the lead mines of the United Kingdom for 1861 shows an increase of 2118 tons over 1860.

**ZINC.**—Owing to the low price of this metal during the year, several Zinc Mines suspended operations.

**PYRITES OR SULPHUR ORES.**—The amount of ores of sulphur produced in 1860 was about 10,000 tons less than the produce of the previous year—which was reported 135,669 tons. The amount of these ores imported during the year 1861 93,528 tons; quite an amount of this aggregate was made up of shipments from this State.

**IRON.**—The Pig-Iron produced was also slightly depreciated from the product of 1860. Means are being taken to obtain more accurate results as to the cost of producing iron in the various districts throughout the Kingdom.

**COAL.**—Much interest seems to be manifested at the rapid waste and exhaustion of English coals. The Report before us speaks as follows upon this head:—

The rate of exhaustion which is going on over our coal fields still increases. From 3,052 collieries there was used and sold in 1861, 83,635,214 tons; 2,500,000 tons were wasted in the process of working, and burnt at surface on the

collieries of Durham and Northumberland only. The total waste must, therefore, have been very large, although information thereof could not be correctly obtained.

#### RECENT INVENTIONS.

**ELECTRIC LIGHT IN MINING.**—A French inventor has produced an apparatus for an electric light designed for miners, which is said to be decidedly superior to anything yet introduced and perfectly safe from gas explosions, by means of a proper isolation. The apparatus is convenient and portable, and will burn for twelve hours without diminution of light. The inventor hopes to still further improve the apparatus in several particulars—such as compactness, intensity of illumination, duration, etc.

**GAS FROM COMMON AIR.**—M. Mongruel is the inventor of a process for making gas from air, and the gas so produced is exhibited on Aldersgate street, London. The air is conveyed through a tube to a vessel containing the matter which renders it ignitable, and from thence it passes to the lamp. The light is much clearer than that proceeding from the ordinary gas; it is represented to be much cheaper, and the inventor announces that explosion is impossible.

**APPLYING WASTE HEAT FROM COKE OVENS.**—An invention which relates to the mode of utilizing the spare heat of coke ovens, for the purpose of heating air for blast-furnaces, calcining ironstone and other materials, and for heating and smelting iron, has been specified by Mr. J. Harding, of Leeds, Eng. He causes the mouths of a group of coke ovens to open into a flue, which leads directly to the chamber in which the heat is to be employed.

**IMPROVEMENT IN ROLLING IRON, &c.**—There is now in course of erection at the Dowlais Iron Works, a self-acting blooming machine for blooming railway iron, etc. It is claimed to be the greatest improvement made since rolling commenced. Mr. Charles White, of the Taff Vale Rail Works, Wales, is the inventor and patentee.

**SEWING MACHINE IMPROVEMENTS.**—A new sewing machine has been brought out, working two needles at once. It is intended to work on gaiters, boot tops, and other articles requiring parallel seams. Another invention recently brought, before the public is a button-hole stitcher, which has been adopted, and the right to use it is purchased by the leading sewing machine companies. It holds the cloth steadily while the needle revolves. Still another is announced, which in addition to performing all the styles of common plain sewing, will make any requisite description of embroidery, fringe, gimp, ruffling, netting, &c., at the rate of a yard a minute. The embroidery is said to be especially beautiful, and superior to the finest Parisian, and all the trimmings are better than can be made by hand, either light or heavy, and of various colors.

**MULTIPLICITY OF PATENTS.**—In the official list of "Agricultural Inventions or Discoveries for the year 1861," are 25 bee-hives, 51 cultivators, 26 churns, 70 harvesting implements, 26 corn planters, 41 plows, 45 seeding-machines, and 19 thrashing-machines.



## MINING NOTABILIA.

**THE OPHIR.**—The workmen in the Ophir mine, on Saturday last tapped a ledge—probably the Virginia—from which a stream of water flowed, in such quantity that the pumps were unable to keep it down. As a consequence the works were stopped, at last accounts, from the water rising in the mine.

**THE total yield of gold from British Columbia up to Jan. 1st, 1863, as reported by public shippers is \$6,917,146.** These figures do not include the shipments through private hands. The amount so shipped would probably swell the total yield of the Colony since the first discovery of gold there to about \$7,500,000.

**ESMERALDA.**—The last *Aurora Star* gives a good showing of the mining affairs in the Mono and Esmeralda regions. The "Bodie Bluff Consolidation," the "Julia Elizabeth," on Martinez Hill, and the "Monroe and Thatcher Tunnel," in Willow Gulch, all seem to be prosperous, with rich yields in the present and richer prospects ahead.

The Stock and Exchange Board recently established there meets with some considerable opposition on the part of a portion of the people; but the *Star* appears to think that it will prove beneficial to the District by driving worth less stocks from the market and enabling those who have really valuable stock to bring the same into notice upon their real merits, with an official character and place assigned them in the weekly authenticated reports. Much, no doubt, might be said both for and against the plan of this organization. Reports and transactions of this Board will be found regularly in our columns under its appropriate head.

**GOLD MINING ON THE FRESNO.**—The *Mariposa Gazette*, of the 13th January, says that the gold veins on the Fresno are paying well, wherever they are worked. Several parties, in lieu of something better for separating the ore, are pounding the rock in mortars and making good wages.

**SALE OF A MILL.**—"Winter's Mill," on Carson River, about two miles above Dayton, has been sold to the Ophir Company who will immediately erect crushing machinery on an extensive scale—100 stamps being named as the probable complement of the mill under its new auspices. The water power is represented to be abundant.

**FOUND IT AGAIN.**—The Virginia City *Union* says that the Enterprise Company, on the hill a short distance west of town, after running their lower tunnel in about fifty feet, have again struck their ledge, which is some four or five feet wide, and appears to be rich; in fact, there are none but rich ledges in that hill.

**MINING IN NEVADA.**—The Nevada *Transcript* says: "All the ditches at Quaker Hill are full, and the miners in that vicinity have commenced operations. The claims of Jacobs & Sargent have undergone a thorough overhauling. They are now ready to commence to take out thousands of dollars. Sneath & Clay on Gold Flat continue to take out cart loads of rock filled with the bright ore. An offer of \$100,000 was made to one of the parties, a short time since, for one-third, and was refused."

**TREASURE SHIPMENT.**—The treasure shipment per steamer Golden Age, was as follows:

To England.....	\$1,336,894 07
" New York.....	354,921 29
" Panama.....	35,000 00
" Acapulco.....	5,000 00
Total.....	\$1,731,815 36

**CORN FOR FUEL.**—The Delzell steam mills at Alanta, Illinois, are now running with corn for fuel instead of wood, that article being cheaper and more easily obtained than either wood or coal.

**POND'S NEW QUARTZ MILL.**—This mill has been completed, and its first trial on Wednesday last, at the Miners' Foundry, which was made in the presence of a large number of experienced mill men, was pronounced a complete success. We defer any description of it until the engravings designed for its illustration in our columns are ready. We had expected them in season for the present issue, but have been disappointed.

## PROGRESS OF THE COPPER INTEREST.

The copper excitement appears to be on the increase; important developments are constantly being made in almost every direction. We have gathered up the following items since our last issue:—

In Nevada county the *Transcript* learns from reliable authority that during the past four weeks upward of twenty valuable discoveries of gold and copper have been made in and around that city. There are at least one hundred men prospecting for new diggings within two or three miles of the place. A new lead has been discovered about fifteen miles from the city, and a company of one hundred men has been formed for the purpose of working it.

The *Democrat* states that Mr. R. S. Whigham, formerly of Nevada, but now a resident of the Southern part of the State, was in that city looking after a copper mine which he discovered in 1852, and which assayed 30 per cent. He did not consider it of any value then.

A correspondent of the *Daily Herald*, writes to that paper a highly encouraging account of the progress of the newly discovered mines of copper in the neighborhood of Crescent City, Del Norte county, from which we condense as follows:—

THE DEL NORTE MINE shipped 1500 lbs. of ore which arrived in this city a few days since. The ore is of the variety known as the Red oxide of copper. This ore when found in large quantities, which is not often the case, is considered a very valuable ore. This shipment can be seen at the office of Messrs. Shiel & Price, 616, Market street. The portion of the vein from which it was taken is 2½ feet wide, eight feet from the surface. The prospects of this mine are highly flattering.

THE MAMMOTH COMPANY will send forward a shipment by the next steamer. This company has "struck it rich" in their tunnel, 70 feet below the surface. The vein is about two feet thick, and the ore, says the *Herald's* correspondent, "has the appearance of a rich bronze"—which would lead to the inference that it consists of "copper pyrites." This variety of ore, when it assumes a "rich bronze" appearance is usually very rich; when it appears of a paler hue it is of a poorer quality, the change in color being due to iron pyrites which are valueless in this connection.

THE ALTA COMPANY have a vein six feet wide, and fine ore. Eight men are at work getting out the ore and opening up the mine. They have now 150 tons of ore on the surface, and will have a large quantity ready for shipment early in the spring.

A new and rich copper mine has been struck near Gasquet's, Smith's River, from which excellent ore is being taken.

In Rockland District, thirty miles from Crescent City, a new mine called the "Cruikshank" has been located and the Company incorporated. Some splendid specimens of ore have been taken from it.

The "Express Company" is running a tunnel 150 feet to strike a vein which is in sight on the surface. A box of ore from this mine came down on the steamer.

A new mine has been discovered in the southern part of Del Norte county from which a large amount of native copper has been taken.

If a smelting furnace should be erected here next spring it would pay well. Such an institution is needed. There are now on the surface hundreds of tons of ore ready for use, and thousands more are coming.

In Calaveras county, there appears to be no diminution of the copper excitement. As a necessary consequence of really valuable discoveries, the lawyers have already got some of the proprietors in this county at loggerheads, and a suit has been commenced in relation to the ownership of the Copper Hill Mining Co's claim, near Campo Seco. A large number of witnesses have been summoned in the case, on both sides.

In Amador county, considerable excitement exists in and about Jackson, in consequence of new discoveries recently having been made near the Mountain Spring House. The *Amador Dispatch* says that Dr. Newton recently refused \$6,000 for his interest in one of the newly opened claims in this vicinity.

EL DORADO.—There is great excitement about Clarksville, in El Dorado county, on the Folsom and Placerville road

as rich croppings of copper have been discovered within the past week. Men from Copperopolis, owners of rich copper claims there, have come over and located claims, and now have men prospecting on them. The new comers express the opinion that the croppings are very promising.

**COPPER SHIPMENTS.**—The Clipper Ship, *Flying Eagle*, has been chartered to load with copper ore for Boston. Sixty tons of ore from Newton, Amador county, were placed on board ship *Peruvian*, a few days since, for Swansea. This shipment was made by Mr. Sheil.

## THE REESE RIVER MINES.

This new mining region, which is just now attracting much attention is located on the Overland Mail and Telegraph Route, about 70 miles South-easterly from Humboldt, and 130 miles from Carson City. The Reese River is one of the numerous class of rivers in that region which fall into a common sink with the Humboldt. Dr. VEATCH, an eminent metallurgist, well known in this city, gives it as his opinion that this is one of the richest mineral regions yet discovered.

We have been favored with the perusal of a letter recently received from that region from which we learn that the mines are being rapidly developed. The ledges, so far as assays can prove them, give indications of great richness. We dare not give the figures which are before us, although they come from sources entitled to the highest credit. The principal ledges opened thus far appear to be the "Oregon," "North Star," "Lander," the "Comet," "Highland Mary," and "Pony Ledge."

The tunnel on the Pony Ledge has been driven 180 feet. That of the Highland Mary is in 61 feet. The Comet Company are at work on their ledge and taking out what is apparently very rich rock. The Oregon and North Star are being worked with vigor. Rock from the former has been assayed and pronounced by Dr. VEATCH, richer than any other yet discovered on the Pacific Slope. The Dr. is daily expected in this city, when we hope to be placed in possession of further facts, with regard to this interesting mineral region.

The Reese River Mining Company, which is interested in fourteen different Ledges, will erect a mill here early in the Spring. The Company have plenty of wood and a good Water Privilege. This is the Company which is running the tunnel into the "Highland Mary." It is made up chiefly of San Francisco Capitalists, who have the money to put it through.

MR. F. W. CASSELL, who is soliciting for the MINING AND SCIENTIFIC PRESS, in some of the lower mining counties writes us that the new silver and copper discoveries in the neighborhood of Mokelumne Hill have created much excitement in that vicinity. Mining operations are rather dull in the districts which he has visited, just at the present, but better times are anticipated soon. We trust our mining friends will cheerfully respond to the calls of Mr. CASSELL, and allow their names to be enrolled as subscribers to the PRESS.

**INJUNCTION SUIT.**—The Yellow Jacket Company of Gold Hill Dist., Washoe, have commenced suit against G. A. Hart and others and enjoined them from working and removing ore from their claim. The plaintiffs claim twelve hundred feet of ground, and aver that the defendants have jumped and removed from a portion thereof much valuable ore, and otherwise damaged their claim, for which they ask \$10,000 damages.

**WASHOE IRONWORKS.**—Three foundries and machine shops and one boiler manufactory are in full blast in this Territory, turning out in the aggregate no insignificant amount of machinery.

**SAN FRANCISCO STOCK EXCHANGE.**—The following gentlemen have been elected officers for this association for the ensuing year:—J. B. E. Cavillier, President; J. Perry, Jr. Vice President; Franklin Lawton, Secretary; Henry Schmiedel, Treasurer.

**SHOT PROOF SHIPS.**—Within the last three years 590 plans for the construction of shot proof vessels have been submitted to the British Board of Admiralty.



## SAN FRANCISCO MINING NOTICES.

**Burning Moscow.**—Shares of this Company, in arrears for assessments will be sold at auction, Feb. 9.

**Baltimore America Consolidated.**—An assessment of 50 cents per share was levied, Jan. 5.

**Savage.**—An assessment of \$35 cents per share was levied, Jan. 7.

**Hawley.**—An assessment of 25 cts. per share was levied Jan. 5, payable in 30 days.

**Cole S. M. Co.**—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

**United States M. Co.**—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

**Sierra Nevada S. M. Co.** levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

**Lady Bryan.**—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

**Ida G. & S. Co. (Russ District)**—An assessment of \$1 was levied, Jan. 14.

**Henry Martin G. & S. M. Co.**—“Thomas Wallace, Trustee,” gives notice that whereas certain parties illegally claiming to be Trustees of this Company, have changed the name of the Corporation to the North Star G. & S. M. Co., and illegally elected officers for the same, the public are cautioned against such acts, etc.

**RED, WHITE AND BLUE G. & S. M. Co.** levied an assessment of 25 cents per share, payable on or before Feb. 1st, office cor. Pine and Montgomery Sts.

An assessment of \$35 per share was levied Jan 6, payable immediately, at office, No. 712 Montgomery street.

**Iona Copper Mining Company.**—The annual meeting of Stockholders for the election of officers, will be held, Jan. 23, at office, No. 502, Montgomery street.

**Live Oak Copper Co.**—The Annual Meeting of Stockholders for election of Trustees, will be held at Office, in Montgomery Block, Feb. 2, 1863.

**Cozo Silver Mining Co.**—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

**Mina Prieta S. M. Co.**—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

**Savage Mining Co.**—The Annual Meeting of the Stockholders of this Co. will be held at Office, 712, Montgomery St. Jan. 13.

**Union G. & S. M. Co.**—The regular quarterly Meeting will be held, at Office, 410, Montgomery St., Jan. 19.

The Madison G. & S. M. Co. advertise names of parties who are in arrears for assessments, and give notice that their stock will be sold on the 29th day of Jan. unless said assessments are previously paid.

**Franco-Americano S. M. Co.**—The following persons were elected officers at the meeting of trustees, Dec. 26th—Chas. F. Galan, *President* and A. S. Gould, *Secretary*. The office of this Company has been removed to No. 528, Clay street, Room No. 2.

**Central Silver Mining Co.**—The Annual Meeting for the election of Trustees will be held Jan. 13, at Office, No. 712, Montgomery street.

**Lady Bryan G. & S. M. Co.**—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

**Desert Mining Co.**—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

**Wide West Mining Co.**—The Secretary of this Company publishes an important notice to Stockholders, in the daily papers.

**Reese River Mining Co.**—Ten cents per share has been levied upon the capital Stock of this Company, payable Jan. 14th.

**San Francisco S. M. Co.** have laid an assessment of \$25 per share, payable on or before Jan. 1st, 1863.

**Pacific Quicksilver Mining Co.**—Assessment No. 3, of \$1 per share was levied, Dec. 22, payable immediately.

**Keystone Copper Mining Co.** advertise for preposals to purchase or treat 3d quality copper ore. Proposals received till Jan. 15th.

**Mammoth Ledge Mining Co.** give notice of an assessment levied and payable on or before Jan. 13th. Also that the first annual Meeting for the election of Trustees will be held at office, Jan. 17th.

**Hale & Norcross S. M. Co.** have levied an assessment of \$5 per share payable on or before Jan. 26th.

**MEREDITH GOLD & SILVER MINING Co.**—An assessment of two and a half dollars per share (five dollars per foot) was levied by this Company, Dec. 11th, payable immediately, at office, 712 Montgomery St.

**BULLION G. & S. M. Co.**—The Stockholders are notified that they will hear something to their advantage by calling at the office of the Company, cor. Pine and Montgomery Sts.

**EMMETT G. & S. M. Co.**—An assessment of twenty-five cents per share was levied, Nov., 21st and is now due, and payable at office 326 Clay St.

**VIBBARD G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office 326 Clay St.

**DOYLE G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office No. 326 Clay St.

**CHARLES CANY MINING Co.**—An assessment of \$1 50 per share was levied on the stock of this Company, Dec. 14th, 1862, payable on or before January 14th, 1863, at office, 338 Montgomery St.

**LIVE OAK COPPER MINING Co.**—Office, Montgomery Block—An assessment of thirty cents per share was levied, Dec. 1st, 1862, payable in thirty days.

**NORTH POTOTS SILVER MINING Co.**—An assessment of four dollars per share was levied on this Company, Dec. 11, 1862, payable on or before January 16th, 1863, at office, Cor. Battery & Washington Sts.

**IOWA MINING Co.**—An assessment of Four Dollars per share was levied, Dec. 4th, payable at office 522 Montgomery St. on, or before Jan. 3d, 1863.

**JOSEPHINE MINING Co.**—An assessment of two dollars per share was levied, Nov. 19th, and is now due and payable at office No. 21 Stephenson House.

**BURNSIDE S. M. Co.**—An assessment of one dollar per share was levied, Nov. 17th, payable within 30 days, at office 712 Montgomery St.

**HAWLEY MINING Co.**—An assessment of 50 cents per share was levied, Nov. 15th, payable at once, at office 204 Front St.

**AMERICAN QUICKSILVER MINING Co.**—An assessment of one dollar per share was levied, Dec. 16th, payable at Company's Office, in Petaluma, within 30 days—At the expiration of which time delinquent Stock will be sold.

**BURNING MOSCOW S. M. Co.**—An assessment of Two Dollars per share was levied, Nov. 25, for the purpose of defraying expenses of steam pump and machinery now being erected to drain the mine. Prompt payment is requested at the Company's office, corner of Montgomery and Jackson Sts., to Jos. P. Nourse, Sec.

## WASHOE MINING NOTICES.

**Martin White.**—An assessment of 20 cts. a share was levied, Jan. 2.

**Oriental G. & S. M. Co.**—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and C St., Virginia City.

**Norman S. M. Co.**—Middleton & Sons, No. 40, Montgomery Block, will sell delinquent stock of this Company, February 16th.

**Baltic Mining Co.**—Notice is given of an adjourned sale of shares in this Company, to take place on the ground, Jan. 31st.

**Progress G. & S. M. Co.**—An assessment of 20 cents per foot was levied, Dec. 27, 1862, payable forthwith.

**Sweezy Co.**—Washington Ledge.—An assessment of \$10,000, being \$5½ per foot—was levied on the stock of this Company, Dec. 28, payable at the Secretary's Office, Medan Building.

**MINERS' MEETING.**—At a meeting of the shareholders of the Siegel Mining Company, it was resolved that a meeting be called of all the miners of the Siegel Mining District, for the purpose of making laws by which said District may be governed, and that said meeting shall take place on the 15th day of January, 1862, in said Siegel District, in or near a certain place better designated as the Siegel Mining Company's Cabin.

**Caution.**—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

**Ashland Co.**—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

**Eldorado G. & S. M. Co.**—An assessment of one dollar per share was levied, Dec. 31, 1862, payable, Jan. 22, 1863, to the Secretary, at corner of Montgomery and California streets, or to the Superintendent at Virginia City.

**La-Plata Oro Co.**—Gold Hill District.—An assessment of two dollars per share was levied, Dec. 26, payable at once,

at Office of the Secretary, Court-house Building, Virginia City.

**Texas Co.**—Tennessee Ledge.—An assessment of 25 cts. per foot was levied, Dec. 22, payable on or before Jan. 21, 1863.

The Regular meeting of the Company for election of officers, will be held at the Comet Saloon, Virginia City, on Saturday, Jan. 21.

The North American Co., Gold Hill, will sell at auction Jan. 31, stock of shareholders delinquent in payment of assessments.

**MARTIN WHITE MINING COMPANY.**—An assessment of ten cents per foot has been levied, payable to the Secretary, at office on C Street, Virginia City.

**THE SWEENEY Co.**, Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

**POORMAN G. & S. M. Co.**—An assessment of Five Dollars per share was levied, Nov. 9th, and another of Ten Dollars per share, Nov. 21, payable at once to the Secretary, R. J. Mitchell.

**COLEDONIA TUNNEL AND MINING Co.**—An assessment of Thirty-two Dollars per share was levied, Dec. 8th, payable immediately to the Secretary, Martin White.

**THE CHIMNEY ROCK Co.**, lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Bach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

**LA CROSSE MINING Co.**—An assessment of \$1 25 per share was levied, Dec. 8th, payable at office 73 C Street, Virginia City.

**HAWK EYE SILVER MINING Co.**—An assessment of 25 cents per foot was levied, Dec. 6th, payable immediately to S. A. Kellogg, Sec. Gold Hill.

**MOBERGAN Co.**, Cedar Hill.—An assessment of fifty cents per foot was levied, Dec. 5th, payable forthwith, to the Secretary at Virginia City.

**ORIENTAL G. & S. M. Co.**—The 3d assessment of 15 cents per foot, was levied, Dec. 8th, and is payable at office, No. 31, C Street, Virginia City.

## ESMERALDA MINING NOTICES.

**THE ZENOBIA LODE COMPANY**, give notice that they claim a superior title to the Johnson Co., claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder,

## MINING AND SCIENTIFIC PRESS.

**THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.**

**THIRD YEAR! VOLUME VI.—NEW SERIES!**

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

**EWER & SMITH, Publishers,**

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



## Mining and Scientific Press.

W. B. EWER, EDITOR.

MONDAY EVENING.....JANUARY 26, 1863.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, Proprietors.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## DISTRIBUTION OF GOLD AND SILVER.

The most productive quartz ledges or lodes, generally, are those which are the narrowest. There is a lode of tin in Cornwall, Eng. only three inches in thickness, which is very valuable; in the same vicinity there is a copper lode only six inches thick, which is more profitable than one twenty feet thick in the same hill. The famous Copper Falls vein at Lake Superior is but 8 inches thick, and the Cliff mine 12. The richest veins in this State are generally very narrow, rarely exceeding an average of 12 or 15 inches. There are many very large veins in the State, some averaging as high as 10, and even 15 and 20 feet in thickness. Were this class of veins to pay as much to the ton as the smaller ones do, the profits on them would be so enormous as in a short time to so augment the product of gold as to seriously affect its comparative value.

Gold and silver form the chief basis of the circulating medium, and Providence seems to have so ordered their distribution throughout the globe, as to require about the same amount of labor for production, in one place as another. Were it otherwise, incalculable mischief would result to the monetary affairs of the world.

Gold is the most universally and evenly diffused of all metals known to man. Its supply must have been purposely ordered for the very object for which it is principally used. Those portions of the earth which were first peopled by man contain but limited supplies. The wants of man in those days did not require a large supply. Commerce was scarcely known, and the little that was carried on was chiefly in barter which did not require a large circulating medium. As man increased on the earth, and as artificial wants grew up, commerce was called into being to supply those wants. A material for a circulating medium was needed, and it was found in the distant regions whither the new conditions of society led man in his travels and enterprise. The ancient Ophir, wherever it may have been, furnished the material, which was called for by the sudden rise of commerce in the days of Phœnician glory.

Phœnicia went down, and with it the commercial enterprise of the period. The wars and conquests which destroyed the peaceful and elevating pursuits of those days were succeeded by the dark ages. When the light of civilization again began to dawn, Columbus introduced to the world another Ophir, in the central portions of the American continent, from which the increased demands of commerce were once more supplied.

Years and centuries rolled on, and the nations had again become in a measure torpid. With the dawn of the present century, a new commercial era was introduced. The Arts, Sciences and Commerce were advancing with rapid strides, and men began to be in want of another increase to the circulating medium. The first resort was to an imaginary basis. The commercial world were relying upon a paper medium from the sheer necessity of the case. The activity of the times pushed a few pioneers of the "progressive race" to the western shores of our continent, and here, in the mountains of California, was again found the needed supply

which the wants of the age so imperiously demanded. The false basis which necessity had so recently created began gradually to disappear and its place to be supplied by a legitimate substitute.

Thus the means seem to be most wonderfully adapted to the end. From the earliest discovery of this universal medium, it has been found in almost precisely the same conditions. About the same amount of labor is required to produce it now as at its first introduction into commerce, and it occurs in about the same quantities both in its ores and in its placers. May we not see in all this the hand of Providence adapting the means to the end? It is idle to talk of monetary derangements growing out of the increased supply of gold. Gold is the great agent which God has furnished man, wherewith to meet the necessities of the race in supplying the artificial wants to which he is now, and will continue to be, more and more subject in his onward progress to social perfection. It will ever be found exactly adapted to the end. God's works and laws are always perfect.

## BRITISH MINES.

In another column we have given the total yield of the mines of Great Britain for the year 1861. On carefully analyzing these figures we arrive at the following facts with regard to the average richness of the mines of that country and the cost of extracting the mineral from several of their ores:—

**TIN.**—The average yield of the tin ore for 1861 was \$375 per ton. The cost of reducing the same appears to have been \$76 36 per ton; but we are inclined to think there must have been a discrepancy between the number of tons produced and the number worked which makes the cost of working appear much larger than it really is.

**COPPER.**—The average yield of copper ore was \$32 60 per ton.

**LEAD.**—The yield of lead ore was \$76 48; the ore being reduced at an expense of \$16 34 to the ton.

**SILVER.**—Only 29 tons of silver ore were raised, which yielded an average of \$243 44 to the ton. We do not learn from what locality this ore was obtained, nor have we the data from which to calculate the cost of its extraction from the ore.

**ZINC.**—The yield of zinc ore was \$24 to the ton, which was worked at an expense of \$14 61 to the ton.

**THE YIELD.**—Gov. Pickering estimates yield of the Washington Territory gold mines for the last year [1862] at from \$8,000,000 to \$10,000,000.

It is from such mistaken and reckless "estimates" as the above that the Land Commissioner founded his estimates, for the immense revenue which he told the country, in his late report, might be derived from the mines of the Pacific Coast. Instead of Washington Territory yielding eight or ten millions of dollars the past year, the entire North Coast, including all British Columbia, scarcely yielded the half of that amount. We append the figures, derived from facts not estimates:—

The total amount of treasure received in San Francisco from the entire North Coast during the year 1862, as derived from official sources, was \$4,931,579. The amount shipped from the Port of Victoria to San Francisco by Wells, Fargo and other public shippers was \$2,167,188; thus leaving a balance of only \$2,764,386 as the yield of Washington Territory and Oregon. The amount forwarded by private hands would scarcely increase that sum to \$3,000,000—or one third the amount estimated by Governor Pickering. Statistics to be valuable should be correct. We can see no good to be derived from an over estimate of our treasure products; facts are what the people want, and all they need—more than that is fraught only with mischief.

**SINGULAR DEVELOPMENT.**—The Territorial Enterprise in its Stock Remarks of Monday last says that several Companies in Gold Hill have struck very rich rock by drifting to the Eastward, at what depth is not stated. Where this rock is struck, the ledge is found pitching to the East. This ledge, it will be recollected, has hitherto been found pitching to the West. It is possible that the miners have just reached the true vein; at all events claims have considerably advanced in the estimation of the present holders, and higher rates are asked than prior to the discovery.

## SAVING SILVER AND GOLD.

It is generally conceded that a large loss of mineral occurs in working gold or silver ores in the slum, or muddy water drained off from the vats which receive the sands from the batteries.

O. W. Easton, of Virginia City, a gentleman of much experience in reference to this loss, makes the following suggestions in the Virginia City Union:—

We all know that in the working of gold ores in California by stamping and grinding, the quicksilver is knocked and ground into spray-silver, so called. Such is to a great extent the condition of a large portion of quicksilver, whether used in the pans with the pulps, or in the barrels in the Friberg process. Thus fine silver, which is not collected, carries off the small portion of metal liberated from the rich Comstock as well as other ores; and a simple mechanical means whereby the silver spray and fine amalgam could be saved, is the grand desideratum I propose that the tailings should be riddled by passing them through copper wire cloth sieves, which have first been electro-plated. The pulp and all the water, with clear water added to liquify the mass thoroughly, should be run over and through a succession of these sieves, the effect of which would probably be to pick out from the mass—by the affinity of the metallic silver on the wire for the silver in the pulp whether as spray, quicksilver or fine amalgam—all the metal now lost. As collected it would fall in globules with the tailings to be saved by quicksilver in rifles placed in the sluice boxes, it having collected in particles large enough to have an appreciable specific gravity. The tailings can be repeatedly riddled as they run, without any labor or attention. The mass must be distributed very thin. Experiment must determine the size of the meshes of the wire cloth. The tailings can be distributed by buttons as in the German sweep tables.

The above is a most excellent and practical suggestion, and could scarcely fail to prove remunerative.

The "wire cloth sieves" to be used for the above purpose, should be "electro-plated" with gold—silver, however, might possibly answer. If sieves of copper or brass wire were used, the abrasion of the sands and the penetrative character of the quicksilver would soon destroy the wire.

In addition to the above we would suggest another plan, which we believe has in part been adopted by some mills.

Instead of the shoal vat in general use let a deeper one be constructed, even if it be of smaller superficies, and immediately over this vat construct an apparatus of the same superficial measurement from which a constant shower bath (a very light one will answer) of cold water may be discharged upon the slum. This cold water shower has an almost instantaneous effect upon the "spray-silver," so called, collecting and condensing the same into globules which readily settle, and thus, with the gold and silver which they contain, become fixed in the sands at the bottom of the vat. Every mill Superintendent is aware that by nearly or quite all the processes ordinarily employed, a large amount of quicksilver is lost, the loss from retorting accounting for but a small portion thereof. This quicksilver thus lost, mostly passes off in the condition alluded to by Mr. Easton; and "that's what's the matter," or the reason, in a large majority of cases, why the rock don't pay. When triturating pans are used, through which a flow of water is allowed for some time previous to the final "clean up," the loss from this source is very large. The employment of the shower bath over the vats, the placing a series of wire sieves, in addition, as suggested by Mr. Easton, and the use of Wheeler's "Separator"—a machine illustrated in the Press of January 12th—for cleaning up, will, we believe, render valuable a large class of veins now deemed entirely unproductive. The two former appliances are exceedingly cheap and simple; and the shower bath will require but a little water. It need not fall much faster than it does in a pretty smart summer shower. The "Separator" is not an expensive machine, and we would advise every quartz miner, visiting the city to call at the Miners' Foundry and see the machine at work.

Every month and almost every day our miners learn something new, and each access of experience, or practical suggestion, made public, adds to the general fund of knowledge and the aggregate yield of our mines. The object of this journal is to establish a general medium of communication among miners, by which information of this character may be speedily and conveniently disseminated among those interested; and it will at all times afford us pleasure to lay before our readers any new ideas or practical suggestions which may for from time to time come up among those engaged in the difficult and intricate art of separating gold and silver from their ores, or mining for those ores in the bowels of the earth.



## GENERAL MINING STOCK REPORT.

**REPORT OF SALES**  
At the San Francisco Mining Stock Board,  
For the week ending January 24, 1863.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Ophir	10,800	12	\$300	2200	1800	1600	2000	2300	2400
Gould & Curry	4,800	4	500	—	2550	3000	3025	3040	3050
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	6,600	4	500	—	380	375	380	390	390
Potosi	2,800	12	400	140	140	152½	155	160	160
Hale & Norcross	8,000	2	500	—	—	—	—	450	—
Sierra Nevada	3,300	1	300	—	60	60	60	57½	—
Danby	8,000	4	500	—	210	—	—	230	—
Burning Moscow	4,500	2	100	70	65	76	73½	66	62½
North Potosi	2,000	1	300	15	13	16	10	—	15
Rogers, F. D.	3,000	1	250	10	6	8	10	—	10
Meredith	7,200	1	125	—	—	—	—	25	—
Charles Caney	1,800	1	30	—	—	15	—	35	—
Sacramento	1,800	1	600	—	37	35	—	18	—
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	500	—	—	—	—	—	—
Savage	800	1	—	1000	—	1100	1140	1180	1150
Iowa	—	—	—	—	—	—	—	—	—
El Dorado	—	—	—	20	20	—	—	—	31
Norton	1,600	1	—	—	30	—	26	26	26
Center Hill Tunnel	—	—	—	3	—	—	—	3	—
Mount Davidson	10,000	3	200	—	—	—	—	—	—
Wide West	1,200	1	600	—	305	375	—	365	4
Antelope	1,200	1	600	—	—	—	220	200	—
Esmeralda	1,600	1	1000	57½	55	55	55	55	55
Real Del Monte	4,400	1	400	22	21	22	22	22	24
Yuma	1,200	1	100	8	—	—	—	5	6
Utah	—	—	—	—	—	25	40	50	67
Silver Hill	3,000	1	—	22	22	22	22	23	22

\* 4 shares to 1 foot.      † New Stock.

## Coso Stocks.

The Josephine changed hands at the Stock Board, on Monday at \$16, on Tuesday at 16; on Wednesday 16, on Thursday at 16, on Friday at 16. Coso—changed hands on Thursday at 10 dollars. Willow Springs—sold on Tuesday at \$20.

## Mexican Mines.

Mina Prieta finds no recent buyers, but is held at \$140. Dios Padre was quoted on Tuesday and Thursday at \$33, on Friday at 30.

SAN FRANCISCO, Jan. 26th, 1863.

## STOCK REMARKS.

The mining stock transactions of the past week have been unusually large, and probably embrace a wider range of stocks than has ever before been noticed in the market. We quote for the week, sales in 33 different companies; mostly at prices which show a decided improvement over any similar period. These facts augur well for the favorable progress of our mining interest, and indicate such a tone of confidence among our own capitalists who seek high percentages, as cannot fail to operate most favorably in attracting hither foreign capital, which is satisfied with much lower percentages whenever safe investments are offered.

The peculiar sensitiveness of Ophir stock has again been most remarkably manifested. We quote in a range from \$1600 to \$2650! It sold early on Monday at \$2600 and on Wednesday was quoted at the Stock Board at \$1800—a decline of \$1050 in three days! The ostensible reason of the decline was one which, in the mind of an experienced miner, would not affect the stock to the value of two per cent.

Gould & Curry still continues in demand at advanced rates. The advance is attributable to the demand for the stock, which greatly exceeds the quantity offered. Speculation in the January dividends is still indulged in. Dividends to the foot, monthly for one year were sold for \$80 on Friday, and \$90 was offered on Saturday. \$92½ was freely offered for the January dividend.

Savage is still advancing; shares having gone up \$250 during the week. Their advance to \$200 on 60 days is confidently predicted.

Chollar and Potosi remain at about last quotations, with a very slight advance. Buyers will probably hold shy of both until the result of the pending suit is announced.

Norton, which was in demand, a week ago, at greatly advanced rates, has not sustained itself during the past week; buyers are waiting further developments with regard to the "rich strike."

Danby has advanced \$40 per foot over last quotations. Still further advances in this stock may be looked for, as it will soon become a dividend paying institution. The company's mill is nearly ready to start, and a large supply of good ore awaits its completion.

## ESMERALDA STOCKS.

Considerable confidence is beginning to be manifested in Esmeralda stocks which are able to pass the ordeal of the "Esmeralda Board." While that institution, as now managed, will doubtless exert a beneficial influence on legitimate stock operations, it cannot be otherwise than detrimental to the development of new mines. It is advantageous for San Francisco but the reverse for Esmeralda.

Wide West has declined a little in consequence of the injunction of the Dimes Company. Holders should not be alarmed as that suit will scarcely reach the dignity of "a tempest in a tea-pot" affair.

## TRANSACTIONS IN SHARES. \*

Ophir—60 shares at \$2,100 per foot; 120 at 2,050, 60 at 2,150; 36 at 2,250 60 at 2,250; 60 at 2,400; 60 at 2,500, 60 days; 60 at 2,650; 138 at 2,250; 120 2,650; 6 at 2,200; 24 at 2,175; 98 at 2,100; 18 at 2,400; 120 at 2,550; 360 at 2,150 Gould & Curry—6 at \$3,100; 40 at 3,100; 12 at 3,050, 40 at \$3,100; 16

3,125; 20 at \$3,250, 60 days; 80 at 3,200; 40 at \$3,250; 20 at 3070; 60 at 3,075 Chollar—20 at \$390; 20 at 395; 40 at 390; 20 at 400, 32 at 397½; 28 at 400 Savage—10 at \$1,150; 5 at 1,125; 5 at 1,150; 10 at \$1,250, buyer 50 days; 5 at 1,220, 5 at 1,225; 5 at 1,200 5 at 1,160. Potosi—10 shares at \$150; 15 at 155; 18 at 155; 40 at 157½; 20 at 160; 20 a 160 Sierra Nevada—6 at \$60; 10 at 60; 20 at 60; 12 at \$57½; 12 Burning Moscow—12 at \$75; 5 at 70; 10 at 72½; 20 at 72½; 0 at 80; 15 at 77; 18 at 76, 30 at 75. Charles Caney—25 at \$20; 20 at 19; 40 at 20; Sanborn & Co. quote at \$21 Meredith—25 shares at \$27½; 10 at 28; 26 at 32½. Central—42 at \$1,600. Hale & Norcross—10 at \$520; 10 at \$530. Daney—40 at \$210; 20 at 225; 28 at 240; 32 at 240. North Potosi—10 at \$11; 20 at 15; 10 at 14; 40 at 13½; S. & Co. quote at 16 Rogers, F. D.—40 at \$13; 26 at 10; 58 at 10. Norton—50 at \$30; 50 at 31; 70 at 30; 25 at 32½; 10 at 35; 50 at 30; 20 at 35; 50 at 30; 25 at 31; 50 at 28. Burnside—50 at \$16; 25 at 16; 15 at 17; 30 at 14. Desert—10 at \$7; 20 at 6; 10 at 6. Hazel Green—30 at 3½; 50 at 8; 25 at 3½ Mount Davidson—5 at 4½; 100 at 4; 50 at 4½; 25 at 5; 10 at 5. Sacramento—10 at \$35; 10 at 40; 5 at 45; 10 at 47½. Union, Russ District—100 2½, 175 at 3; 200 at 3½; 100 at 3.

## ESMERALDA DISTRICT.

Wide West—10 shares at \$405; 5 at 400; 20 at 390; 40 at 440, 60 days; 21 at \$80; 40 at 375; 30 at 370. Antelope—10 at \$220; 20 at 215; 10 at 210; 5 at 230. Real del Monte—40 at 22½; 10 at 23; 14 at 24; 15 at 22½, Sanborn & Co quote at \$25. Silver Hill—15 \$22; 11 25; 18 at 23; 25 at 21; 20 at 22. Atun—50 at \$5; 50 at 6; 25 at 5; 50 at 5, 5 at 5. Garibaldi—25 at \$24; 25 at 25; 30 at 23; 19 at 26; 10 at 27—: Esmeralda—10 at \$57½; 20 at 55; 30 at 58; 60 at 55. Rogers, V. D.—25 at \$60.

\* Quotations made at given rates per foot.

## Stocks in Virginia City.

Corrected by WIGHTMAN & MITCHELL for the Virginia City Union.

The following stocks, were in the market in Virginia City, and held at the prices annexed:

Ashland	.....\$10 00	American Basin Co.	.....20 00
La Crosse	.....25 00	Hawkeye	.....20 00
Santa Fe	.....25 00	Consolidated Cedar Hill	.....3 00
Empire	.....5 00	Utah	.....40 00
Santa Rita	.....35 00	Industrious	.....5 00
McBoe	.....25 00	North American	.....5 00
Zouave	.....10 00	Philadelphia	.....4 00
Belvidere	.....10 00	Sigel	.....2 00
York	.....4 00	Virginia	.....5 05
Governor Nye	.....7 00	Commercial	.....4 00
Baltic	.....17 50	Udell Sam	.....3 00
Peyton	.....10 00	Bloomfield	.....8 00
Durgen	.....4 50	Cole	.....20 00
El Dorado	.....5 00	Golden Eagle	.....5 00
Summit	.....5 00	Deatur	.....2 50
Washington Ledge	.....6 00	Atchison	.....150 00
Milton	.....5 00	Comet (Simpson's Pork)	.....60 00
Cedar Hill Tunnel	.....5 00	Mohagan	.....6 00
Hazel Green	.....5 00	Golden Era	.....10 00
Eureka	.....25 00	Oscelota	.....8 00
Laboring	.....17 50	Madison	.....25 00
Swezey	.....10 00	U. S. Tunnel	.....5 00
Caledonia	.....10 00	Sacramento	.....60 00
St. George	.....4 00	Harrison Co., Goller Ledge	.....5 00
Adriatic	.....25 00	Monarch	.....20 00
Golden Gate	.....5 00	Irvine	.....5 00
		Bald Eagle	.....4 00

## ESMERALDA STOCK REPORT.

At the meeting of the Esmeralda Stock Board, held January 9th, 1863, the following business was transacted in stocks, as reported in the Esmeralda Star.

Rodie Bluff Consolidation—50 feet offered at \$10; bid 6, cash.  
Peru (two feet to the share)—25 shares offered at \$8.  
10 shares Garibaldi withdrawn.  
One-thirtieth interest in the Nevada Tunnel withdrawn.  
Heath—10 shares offered at \$10.  
Falls of Clyde—100 shares offered at \$5.  
St. Louis—\$12 bid; no stock offered.  
Hanover—20 shares offered at \$25; bid 12.  
Live Yankee—25 shares offered at \$10; bid 8.  
Nevada—25 shares offered at \$10.  
Del Monte—12 shares offered at \$20; bid 15.  
Pride of Antelope—25 shares offered at \$5.  
Union Tunnel—10 shares offered at \$15.  
Alturus—10 shares offered at \$15.

## Esmeralda stocks offered at San Francisco Valuation—

Antelope offered at	.....\$100 00	Wide West offered at	.....\$300 00
Garibaldi	.....23 00	Utah offered at	.....30 00
Main Esmeralda	.....45 00	Yuma	.....8 00
Silver Hill offered at	.....15 00		

Published by order of the Board. J. B. BLANCHARD, Sec.

At a meeting of the Board, held January 16th, 1863, the following stocks were offered

Pride of Antelope—25 shares offered at \$5.  
Union Tunnel—10 shares offered at \$15.  
Alturus—5 shares offered at 25.  
Bamboo—20 feet offered at 75—bid 60.  
Strawberry—25 shares offered at 16—bid 8.  
Ex. Johnson—100 feet offered at 8.  
Freno—25 feet offered at 8.  
Del Norte—12 shares offered at 36.

## Esmeralda Stocks offered at San Francisco valuation:

Antelope	.....offered at \$225 00	Wide West	.....offered at \$410 00
Garibaldi	....." 16 00	Main Esmeralda	....." 45 00

Silver Hill	.....	20 00	Utah	.....	45 00
Yuma	.....	8 00	Real Del Monte	.....	25 00

## TRANSACTIONS OF THE WEEK.

240 feet of Bamboo sold at \$40 per foot.  
65 shares Strawberry sold at \$10 per share.  
100 feet Golden Age at \$5 per foot.  
25 shares Peru, at \$5 each.  
20 feet Bodie Bluff Consolidation, at \$12.

Application for Examination and Classification was received from the following Companies:—Garibaldi, Ural and Julia Elizabeth  
J. B. BLANCHARD, Secretary.

## WASHOE STOCK REPORT.

[COMPILED FROM THE DAILY TERRITORIAL ENTERPRISE.]

Monday, Jan. 12.—The Flowery Hill Company, Summit District, it is said afford indications of a good ledge. The work of prospecting is being diligently prosecuted, and many outsiders are watching the result with much interest, as indicative of what may be expected from other mines in the district. The Hale & Norcross Company have placed their mine in good condition for working, and, at last accounts, were about ready to commence taking out rock. Their hoisting machinery is driven by a 15-horse power engine. The Pride of Washoe Company have started a tunnel to strike their ledge at a depth of 75 or 100 feet. Their ledge is about 17 feet in width at the surface, and prospects well in both gold and silver.

The stock operations, for to-day have been limited and unimportant, tho' much enquiry has been made for claims at figures slightly below the prices asked. Two lots of fifteen and ten feet each in the Wellington Company sold at rates not desired to be made public. Fifteen feet of Birdsell sold at \$16. Twenty-five feet of Walker & Co. sold at low rates.

Tuesday, Jan. 13.—The La Crosse Company have entered into two several contracts with responsible parties for the raising of 4000 tons of ore, the contractors furnishing their own engine and other machinery. Transactions in stocks have been light to-day. Two sales, of 5 and 10 feet in the La Crosse are reported at an advance on last quotations. The development of a suit between the Yellow Jacket and the Union and Laboring Companies at Gold Hill, has thrown some stock in all these companies into the market at reduced figures, but the demand is almost equal to the supply. Twelve feet of Birdsell sold at \$17, and 6 feet at \$17 50; eight feet of Allen at 46; 10 feet Fairview at 20. 25 foot Gay, at \$3 50.

Wednesday, Jan. 14.—Transactions light, to-day. The high rates of first class stocks in San Francisco have caused a general firmness, and good ground was sparingly offered. Baltic was quoted to-day at 17½ and Zouave at 8 dollars per foot. Prices remain substantially as yesterday and the day before.

Thursday, Jan. 15.—Considerable activity was manifested in stocks to-day, though but few sales were effected. Inquiry was made for several stocks which have been for some time entirely out of demand. There will no doubt be greater activity in stocks in future, than during the past Fall or Winter. The developments made during the last few weeks in the various claims of this and Gold Hill districts seem to have given renewed confidence in the richness and permanency of the mines of Washoe. The Norton Company made a rich strike to-day, the same which caused the sudden advance of that stock in the San Francisco market a week since. The Oriental, at Gold Hill, is said to have struck a ledge which has the appearance of being valuable. The ledge has been penetrated with a tunnel about 6 feet, but has not yet reached the opposite side. This Company was formed for the purpose of running a tunnel of great and indefinite length into the hill west of town. They claim several ledges on the line of the tunnel.

Sacramento is in demand and saleable at \$35 per foot. This Company has commenced operations on their lower tunnel, with good results, which probably does much for the better repute of their stock. Some inquiry is made for La Crosse, for which \$17 is offered. The evident approach of a lawsuit appears to have brought the stock of this Company into more favorable notice. Inquiry is made for U. S. Tunnel stock. It can be sold at low rates. Cedar Hill Tunnel is without demand. Several important sales have taken place to-day.

Friday, January 16.—There is some demand for claims not prominent in the market, but generally at lower rates than holders are willing to accept. Those only who are in pressing want of money will accede to the terms of the buyers—consequently few transfers are noted.

Sacramento is in demand at \$40, a material advance over last quotations; but little, however, appears in the market at any price. Ten feet sold to-day at 40. Beach Paxton are taking out some fine looking rock. Their stock appears to be entirely withdrawn from the market; \$30 is offered without finding sellers. The Flowery Hill Co., alluded to on Monday have struck ground in their tunnel which indicates a near approach to their ledge. The Yellow Jacket has enjoined the Union and Laboring Companies from further operations on their claims. The Birdsell Company have attained a depth of 150 feet from the bottom of their shaft and are about to strike their ledge at that depth. Nine feet of this stock sold at \$20 per foot.

Some 300 of Yolo have changed hands at rates which are not made public. The stock is in great demand at low rates.

Saturday, Jan. 17.—There was some enquiry, to-day, for Sacramento at \$40; Beach & Paxton at 25 to 30; for La Crosse at 16 to 17, and for Birdsell at the same figures. Prices same as last quotations. The business of the day has been light.

## HUMBOLDT STOCK.

A small sale of Humboldt stock was effected in Virginia City on the 16th instant at low rates in several claims at an average of \$3 per foot. Considerable stock still remains in the market. Accounts from this district according to the Territorial Enterprise are somewhat less satisfactory than the predictions of six months since had warranted. One or two mills commenced operations there a few weeks since, and the returns from the ores of a number of the ledges was quite meagre. In one instance where the assays had engendered large expectations, nothing more precious than lead and antimony was obtained from a crushing of ten tons of rock. Before spring opens three mills will be in operation in the Humboldt region and the value of the mines there will be in a measure settled. Assays amount to but little in arriving at the actual value of a mine.



## California Copper Mines—Practical Suggestions.

EDITOR OF MINING AND SCIENTIFIC PRESS.—Sir:—Having noticed some time past, through the medium of your journal, that while the capitalists of this State, especially those of San Francisco, are deeply engaged in the gold and silver mines of Washoe, and other places, and that they are also turning their attention to the development of the copper lodes, in various places and throughout this State, and having had several years experience in the working of such, in the mines of Cornwall, Eng., I beg you will give insertion to the following remarks and suggestions which I have thought proper to hand you for the perusal of your readers.

The mineral indications, from what I have seen and heard in this country, far surpass in value and extent those of England; so much so, that where the latter have only a few colors and those at a considerable depth, you have paying rock from the word go, and in some instances, in very respectable quantities; consequently with proper and judicious management, the copper lodes of California must, ere long, figure most prominently, and will most undoubtedly prove to be highly remunerative to the speculators, whilst those of England to the first, second, and in some cases to the third parties, proved a failure, but little or no copper being found till at the depth of two or three hundred feet, consequently many mines were abandoned, leaving immense riches still at a greater depth. With these facts in mind, the speculator here may think himself blessed; for in comparison with the "Old Country," he can not only see but feel his way. This the most skeptical must admit, for we have the ore, in many instances, sticking out at the surface, and with practical men as managers, such mines must prove to be of the first order, and unquestionably good.

As a Superintendent of Copper Mines, I have had several years practice in Cornwall, and would recommend to those engaged in such in this Country, strict adherence to the keeping of the Working Plan, it being, according to my ideas, a desideratum of the greatest importance to both Company and Agent, however competent the latter may be. For instance, a Working Plan shows him, at a glance, the exact position of the different points of operation, and whether the bearings of the levels above, and below correspond, and likewise the distance of underlie between the same. In many instances where the Superintendent has not the assistance of this, the productive part of the Lode has been lost, caused by a "split off," the same being so minute at the separation, as not to be noticed; for where this occurs, there is generally a change in its bearing, but, of so little a moment, as not to be perceived. When laid down on paper, however, it becomes apparent, and puts the agent on his guard. He examines the point referred to, and in many instances I have witnessed a branch, scarcely discernable, to have left the main vein, which, on opening, only a few feet, has increased in size from three to six feet thick, and this the productive part of the Lode. In all cases where branches or spurs are intersecting the main part, they should be shown with the bearings, etc., on the Plan, so as to give the Agent, and also the buyer, and seller, an idea where to expect an improvement, or at least, the junction of the same on the levels above, or below; for in most cases it does benefit the concern.

There are many other desirable objects gained by due attention to said Working Plan, such as the extent and bearings of the different strata of ground in which the Lode is imbedded, whether highly metalliferous or otherwise. Also the junction of different strata, and whether lengthening in depth or not; for as a tree derives its fruitfulness from the soil on which it grows, so does a Lode, or Ledger, with gold, silver, or copper, from the stratum of ground in which is imbedded. Yours Truly, MINER.

C. W. THOMAS, Plaining Mill, California street, facing the Mission R. R. Depot. San Francisco. m1

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts. m1

D. R. J. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner. ap16

KELLY & WADE, Importers and Dealers in Paints, Oils, Turpentine, Etc. Nos. 105 & 107 California street, Bet. Davis and Front. m16

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T. my23

PALMER, HANSCOM & Co. Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market. my23

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual lost was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

## For parting silver from gold when gold

is below 300-1000ths. fine. . . . . 3cts per oz.  
" from 300-1000ths. to 750-1000ths fine. 7cts " "  
" " 750-1000ths to 950-1000ths " 14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
301 " 500, 7cts, " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

## CORN AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPDIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skillful and scientific Professors of Philadelphia, and having made this branch of surgical science my speciality for nine years, enables me to operate skillfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can recommend you with confidence to the citizens of San Francisco, as one of the most skillful and generous of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertions in the new and growing city of the Pacific.

## THE EYES! THE EYES!! THE EYES!!!

## DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hacknied course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone;" "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonable.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.



Regarding Patents.

We desire to call the attention of all those who intend applying for Patents, to our superior facilities for obtaining the same. Our arrangements are such that we can have all the papers prepared, transmitted and returned, with the Patent right, in three months from the time the applicant places the matter into our hands; thus saving at least three months delay.

The expense to the applicant would be rather less, if the business be done by us, than if the papers were sent to New York or Washington.

Thus by patronizing a home institution, our inventive citizens can save both time and money.

We have prompt, intelligent and reliable agents in the city of Washington who attend punctually to all Patent business sent to them. We have agents, also, at London, Paris, Brussels, Hamburg, St. Petersburg, Berlin, Vienna, and other European capitals.

**RECENT PATENTS**—Granted to CALIFORNIA INVENTORS through the Pacific Patent Agency.

**HERMAN CAMP**,—Patent for Quartz Crusher and Amalgamator.

**W. H. RICHARDSON**—Patent granted for *Washing Machine*.

**E. E. MATTESON**, Nevada: *Hydraulic Derrick*. This invention has been illustrated in this journal, and has obtained great celebrity throughout the State.

**ELANDER HEATH**, San Francisco: *Spiral Spice and Sage Mill*. See "Mining and Scientific Press," June 9th, 1862, Vol. V., No. XIII.

**G. F. DEETKEN**, formerly of Nevada: *Apparatus for separating Gold from Pyrites*. This is one of the most useful inventions of the day. Mr. Deetken has successfully worked sulphurets for a number of years in Nevada county, professes to have obtained greater results than others engaged in the same occupation. Mr. D. has recently established himself in this County, on the San Bruno Road, near the Islais Creek, where he has erected chemical and metallurgical works.

LATEST IMPROVEMENT

In LADIES' BUCKLES.

**MR. REICHEL** RESPECTFULLY ANNOUNCES TO THE LADIES OF THIS State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at our address,  
**FREDERICK REICHEL**,  
Manufacturing Jeweler,  
620 Merchant street, San Francisco.

REMOVAL.

**OFFICE OF THE PACIFIC METALLURGICAL WORKS** is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

**COPPER OBES**—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
my30 318 California street, near Sansome, up stairs.

WRIGHT'S PICKS.

**JOHN WRIGHT**, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street,  
je20 Opposite Battery, San Francisco.

LABOR-SAVING

Rock Drilling Machines.

**TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE AND QUARRYMEN.** The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders, for

HAND, HORSE, AND

STEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way. A FOUR-HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process.

Address orders to  
oct-5m] **WM. W. DUNN**,  
Fremont street, bet. Market and Mission, San Francisco.

A. ROMAN & CO.

WHOLESALE AND RETAIL

BOOK ESTABLISHMENT.

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.

A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals. Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Piggot on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Phillips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide, or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell.

Liver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weissbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

Together with many other works in this & similar lines

Books imported to order on short notice.

A. ROMAN & CO.,

417 & 419 Montgomery Street.

Gird's BUDDING KNIFE

THE ATTENTION OF FARMERS, HORTICULTURISTS AND CUTLERS. OR manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, J. SILVERSMITH, (Agent for Patentee,) San Francisco.  
sep1-3m

Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen

Stützen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an.

JUL. SILVERSMITH, Federal Building, Room 23.

RASCHE & SONS,

131 Montgomery street., bet. Bush and Sutter,  
SAN FRANCISCO

WHOLESALE AND RETAIL DEALERS IN

PIANOS, SHEET MUSIC

ITALIAN STRINGS

INSTRUMENTS OF ALL KINDS, &c., &c.

Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;

T. GILBERT, Boston;

C. MEYER, Philadelphia.

Whose Pianos they have always on hand, for sale and to rent.

PIANOS FOR RENT.

New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the trade and professors of music.

MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments and Musical Merchandise.

Sheet Music and Music Books.

GENUINE ROMAN STRINGS, &c., &c., &c.

Lighte's New Patent Insulated Iron Frame is put into all of

Lighte & Bradbury's OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

Melodeons and Harmoniums,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN.

Warranted superior to all others.

Send for a catalogue and Price list.

A. KOHLER, Agent.

Dr. Van Zandt,

Consulting Physician and Surgeon,

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity! Made Subservient for the Cure of all Nervous and Spinal Diseases.

**THAT THIS PRINCIPLE**, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanting by physicians, to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle, and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting, and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRICAL excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct view, and should the origin of all their maladies. Ladies can consult him with entire confidence, as he is no speculator upon human ills—but is proving himself the only member of the legitimate profession in California who is really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately attuned nervous organism, together with their great sympathetic life, renders him doubly able to assign those silent complainings which they bear so patiently and so long. No social disquietude need longer afflict our home circles; for he can arouse the stricken energies; restore the wanted tonicity of the body; awaken the melancholic and desponding; arrest those drains which cause so much anxiety; cure those protean maladies which have so long

Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength; extreme debility and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exciting the Electro-Galvanic current, together with his remedial measures which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore you to usefulness, and spare you a blessing to your family and to society.

All the World Over

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is necessary to restore the ELECTRO-GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and verified by hundreds of patients; so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unassailable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, mental and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or coelestic habit of body.

None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—depression of spirits which weigh you down—wakefulness that knows no sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you of a radical removal of all bodily and mental infirmities, within the scope of science and man to remove.

The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made these affections an especial study, and that he is the only Surgeon in our State, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataract, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29-3m

FREDERICK KESMODEL,

Cutler and Surgical Instrument Maker

517 KEARNY STREET,

Between Jackson and Washington streets,

SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are all uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL,

Inventor and Patentee

ap3 1f



## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of January, 1863.

Jan 21, 21st—GOLDEN AGE, W. H. Hudson, Commander Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidesdorff sts.

## TO THE CLOCK TRADE.

WE HAVE RECEIVED, EX RECENT FLEET OF CLIP-PERS, a fine assortment of the

NEW HAVEN COMPANY'S,

(FORMERLY JEROME)

## CLOCKS,

Comprising all the Desirable Styles. Also a Large Lot of

## Fancy Time Pieces

OF NEW AND BEAUTIFUL PATTERNS.

We shall in future be in receipt of sufficient quantities of the above goods to supply our largely increased trade.

HAYNES & LAWTON, Agents N. H. Clock Co.

No. 516 and 518 Sansome st., cor. Merchant, San Francisco.

ja 26 tf

## SQUARZA'S PUNCH.

## FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR; FOR 1862.

## ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidesdorff street,

Opposite the What Cheer House, San Francisco.

## The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities.

The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a news stand and large Cabinet for minerals; also, a Branch Telegraph Office connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

San Francisco, Jan. 1st, 1863.

Proprietors. tf

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as Mining Superintendent in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Druggist, a Surveyor and an Assessor of Copper Ore. He can give ample testimonials as to his capacity for the position he seeks.

Apply at this Office.

## PHILADELPHIA BREWERY,

Second St, corner of Folsom, SAN FRANCISCO

Heischer, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

Nov 9

## PEOPLE'S

Steamship Line!  
CONNECTING

CALIFORNIA AND NEW YORK,  
via NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

## MOSES TAYLOR,

E. HOWES ..... COMMANDER,

Will be dispatched for

San Juan del Sur,

From Mission street Wharf,

Punctually at 9 o'clock, A. M., on

WEDNESDAY, - - - MARCH 11. 1863.

Connecting at GREYTOWN with the Splendid Steamship

ILLINOIS ..... 3500 Tons.

Reduced rates of Passage and quick trips are secured by the re opening of the Nicaragua Route. These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to

I. K. ROBERTS, Agent,

ja 20 No. 497 Washington Street, opp. Post Office.

## DONAHUE'S

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.

PETER DONAHUE.

## LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast. Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON.

## GREAT REDUCTION

IN PRICES.

## STANFORD BROTHERS,

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

## Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

apl0tf

## TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

## THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300), and to any kind of machinery, will

Save in Transportation, Material and Labor, from

25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and propor-

tionally increase its value.

For full information from the Inventor, apply at the

Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

13. This Wheel is fully GUARANTEED.

Jan 19-1f

## Holiday Presents!

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

## BRAVERMAN &amp; LEVY'S,

621 Wasnington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. Also,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY,

No. 621 Wasnington Street,

Dec 29 1m

Facing Maguire's Opera House.

## LEANDER RANSOM,

Civil Engineer

AND

## SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

## STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. cc7-3m

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,

Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## For Sale Cheap!

A HORIZONTAL STEAM ENGINE OF 4-Horse Power, Flue Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,

Federal Building, cor. Battery and Washington Sts.

Room, No. 23.

## DEETKEN'S

Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$80 to \$100, if desired by mill owners. No power nor clean water required for its purpose. nov8-3m

## SQUARZA'S PUNCH.

## HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff St., near Sacramento.

Branch at 406 Montgomery street.

my30

## JULIUS SILVERSMITH,

Commissioner for Nevada Territory,

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

## JAMES PHELAN,

(LATE J. & M. PHELAN.)

IMPORTER AND JOBBLER,

Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-tf.

## THEODOR KALLENBERG,

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. No. 4 Sansome street, corner Market, San Francisco.

## PALMER, HANSCOMB &amp; CO.,

## GOLDEN STATE FOUNDRY

AND MACHINE WORKS.

First Street, near Market, San Francisco.

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications. Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast. San Francisco, November 29, 1862. 3m

## 50 lbs. MARINE AND

## Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FORQUE, Superintendent,  
WORKS, North Beach; Office, 318 California st., San Francisco.



# Mining and Scientific Press.

A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, MONDAY, FEBRUARY 2, 1863.

NO. 14.

## THE FLOOD IN THE OPHIR.

The "Local" of the Territorial *Enterprise*, in the issue of January 21st, gives a particular account of the recent influx of water into the Ophir and Mexican Mines, in Virginia City, from which we condense, as follows:—

The water was struck in the Ophir about noon on Sunday the 15th inst. Some hands were working in a western drift, and upon striking their picks through the clay casing of a ledge, (the Virginia, probably) a thirty-five or forty-inch stream of water burst forth. It is said that the men had to drop everything and run for their lives—it was no time to fool away precious moments in trying to lug their tools away with them. Although the Ophir and Spanish join each other, the men in the latter did not know of the accident which had befallen their neighbors until some four hours after its occurrence. This threw the Spanish folks somewhat behindhand in preparing against the trouble so soon to come upon them.

The stream, at the time of the visit, some 50 hours after the water had burst in, was still some 25 to 30 inches. It had then formed a kind of subterranean lake about 21 feet deep by 30 in width and 100 in length, and was still rising, in spite of the utmost efforts of the pumps to keep it down, of course all mining operations were at once suspended and a force of about 80 men set to work putting in extra timbering to secure the mine from caving when its sides above the then water mark should be submerged.

**ORE TESTS.**—Several inquiries have been made to us of the different chemical tests that will discover traces of silver and copper in the rock. If our friends who are conversant with this matter will forward information respecting such chemical tests to us, we will be happy to give them publicity. [*Amador Ledger.*]

Persons interested in the above will find the desired information, and much more in the same connection, all valuable to copper and silver prospectors, in late numbers of this paper. A remittance of six months or a years subscription to the MINING AND SCIENTIFIC PRESS, will afford them all the valuable information obtainable from books in relation to prospecting for either silver or copper, and assaying and testing ores of the same. The dissemination of that class of information is the speciality to which this paper is devoted, and no mineral prospector in the silver and copper regions of California can invest \$4 to better advantage than by sending the same to this office and becoming a subscriber and reader of the Press. We shall be extremely happy to receive the names of all who may favor us with cash patronage. We also pledge ourselves at the expiration of the year to refund to any party double the amount of his subscription, who may honestly think he has not got the worth of his money in valuable information from our columns.

**A LONG AND EXPENSIVE TUNNEL.**—According to the *Butte Record*, the Eureka Tunnel Company having succeeded in running their tunnel through the rim-rock, on Table Mountain, [near Oroville] commenced washing on 5th January. This tunnel, we believe, is about 2,000 feet long (through hard rock) and has taken nearly seven years to complete

## COAL.

The coal mining interest of California is beginning to assume an aspect of no inconsiderable importance. Although the coals hitherto produced are generally of an inferior quality, the indications, in several localities, are such as fully warrant us in expecting great improvements in this particular as the excavations grow deeper. The Healsburg Coal Mining Company in Sonoma county, are so well satisfied that such a result may be expected, that they have decided to sink their main shaft, 7 by 3½ feet in size, (which is now down about 65 feet) to a depth of two hundred feet. The work in this mine is being pushed forward with energy. The coal now being taken from this mine finds a ready market in this city, at \$12 per ton.

The Folsom Company, whose mine is a recent discovery, have gone down some 15 feet in the ledge, the coal improving in quality as they descend. The mine is located on the American river, about six miles below Folsom. According to the *Telegraph*, printed at Folsom, the owners are greatly elated with the discovery.

**PROSPECTING FOR COAL IN THE MOUNTAINS.**—A shaft is now being sunk for coal at a point about two miles west of the Half-way House, Carson road from Placerville. Large quantities of a substance resembling lignite, and sufficiently carbonaceous to burn under the blow-pipe, have been found at that place. The parties engaged mostly reside in Carson.

**COAL IN TULARE COUNTY.**—A seam of coal was recently discovered, in the vicinity of the Slate Range, District, in the Southern part of the State. The seam, where it crops out, says the *Visalia Delta*, is four feet thick, and the coal, even from the top, burns freely, giving out a great deal of heat. That paper thinks it is what is called "soft coal" in the Eastern markets. The location is some 18 miles from the Morrow lead, in a southwest direction, with a level country intervening. The effect of this discovery has been to advance the price of every foot of ground in Slate Range 500 per cent. more than it was a week ago. The lucky discoverer himself will undoubtedly realize a fortune.

**COAL.**—England produces from her island mines more coal than any other nation; and yet the coal mines of the United States cover a greater area, in square miles, than the whole area of the British islands.

The auriferous and argentiferous lands of the United States, and those solely on the Pacific coast, are greater in extent than three such kingdoms as Great Britain and Ireland together.

**STRETCHING A POINT.**—Commissioner Boutwell, in addition to other taxes on publishers, has decided that they must take out licenses as "dealers"—because they sell papers to newsboys. What next!

A RAILWAY has been completed across the Pyrenees. The road has been constructed at a cost of about \$12,000,000. It has been built, exclusively, with Spanish capital. The maximum grade is 76 feet to the mile.

## DESTROYING IRON-CLADS AND OTHER WAR VESSELS.

Some two or three months since it was announced that Mr. Whittaker, an engineer on board the U. S. Sloop of War, *Kearsage*, had devised a plan for destroying iron clads and other vessels of war, which appeared so practicable and of such national importance, that the engineer was immediately dispatched from his post to Washington, to communicate directly with the Federal authorities in that city. It is now still more apparent that there is something in the alleged discovery; at all events, the plan is to be tested as appears from the following:—

The iron-clad steamer *Ozark*, 2, now in course of construction at Mound City, eight miles above Cairo, Ill., is about 110 feet in length, will have four propellers, and a turret, twenty feet in diameter, for two large guns. The boilers are in and the armor put on for about sixty feet on both sides. First Assistant Engineer James W. Whittaker is examining the vessel, with a view to apply his new invention for the destruction of iron-clad boats of all kinds, having been ordered there by the Secretary of the Navy for that purpose. It would not be proper to explain what the nature of this invention is; suffice it to say that Mr. Whittaker has letters from chief engineers in our navy and other scientific men, including Captain Ericsson's principal engineer, wherein they express their utmost confidence in the plan, and recommend a trial speedily. Commander Porter is said to be highly delighted with it, and gratified that he is to have the first opportunity of testing it.

## LAKE SUPERIOR COPPER PRODUCT.

The Lake Superior *Miner* sums up the probable yield of the Lake Superior Copper District, for 1862 as follows:— "As intimated last week, our mines did better the past season than any one supposed they would. The shipments of mineral are larger, and the percentage will certainly compare favorably with any past year. Estimating the mineral in round numbers at 2,700 tons, and its percentage at 70, and we shall realize 1,890 tons of ingots from the year's productions. This metal, at the last market quotations, was worth 33 cents per lb. or \$660 per ton, and allowing the \$60 to cover freight, insurance, and smelting charges, and we have the present net value of the year's production, 1,890 tons of metal, @ \$600 per ton, \$1,134,000. This is of course many thousands of dollars more than will be realized on sales, as much was disposed of at lower figures. According to the best data we now have, the mineral shipped from the lake the past season, will not exceed 7,000 tons of ingot copper, the sales of which, past and future, will doubtless average higher than last year. The amount realized from the crop of 1861, has, we believe, generally been estimated at \$3,500,000, which is not too high for 1862.

**SILVER IN NOVA SCOTIA.**—A letter from Nova Scotia states that, in prospecting for gold in the northern and eastern portions of the province, the writer found silver, as well as gold, in great abundance; that in every panful of earth washed from the stream he found pure metal; and veins of spar containing native silver traverse the mountains on each side of the river, and are exposed at some points along the sea-shore.



## NEW MINING AND COLONIZATION ENTERPRISE.

Some months since an association of gentlemen in this city, dispatched two Agents to Lower California, for the purpose of selecting some suitable locality in that country, for establishing an American Colony for Agriculture and Mining purposes. One of these gentlemen was intimately acquainted with the Spanish-Mexican character and spoke the Spanish language. They started upon their mission, and spent several weeks in exploring that region under the escort of a Mexican Guide, and at last selected a location known as the Llanos de Musquit (plains of the Mosquito, a very valuable timber) and lying immediately between the mining district of San Antonio, Cachachili, Ranchita and Las Canoas and Vartana Bay, at which latter point a site has been selected. The steamer Oregon, Capt. Wakeman, passes near this point on her monthly trips from San Francisco to Guymas and other Mexican ports, and will stop for passengers when requested to do so.

When the object of their mission was made known to the authorities and inhabitants, the plan met with their most hearty approval and encouragement, and a grant of 125,000 acres of rich agricultural land, embracing a valuable silver mine, was readily obtained, one of the conditions of the grant being that the grantees should introduce a certain number of settlers thereupon within a certain time. The agents having returned to this city, the Company has fully approved of their action and opened an office at North-west corner of Clay and Front streets, where full information of the plans and prospects of the association can be obtained by those who are already engaged in the enterprise, and where any others desirous of uniting with the same are requested to call. By the payment of \$200, any person who can bring to the Association satisfactory testimonials as to character, etc., can become a member thereof, and joint owner in the grant, mine, town-site, etc. The number of shares is limited to 200. All who come after, must come simply as purchasers, having no interest in the grant.

We have seen a private letter from the U. S. Consul, at La Paz, which speaks in the most favorable terms of the Enterprise, as embracing a tract of land very fertile and susceptible of easy irrigation. It produces native cotton, which grows wild to great perfection, samples of which, on the stock and on the ball, may be seen at the Company's office; where are also exhibited specimens of the ores of gold, silver, copper, etc., which abound in all the mountainous region of that country. Sugar-cane, tobacco, Indian-corn, etc., are raised there to the greatest perfection. The letter to which we have already alluded, states that the project meets with the heartiest approval of the people of that region, and that the colonists will meet with a most cordial welcome on their arrival.

All these facts and many others of importance and interest may be more fully learned by calling at the office of the Association. From the information before us we feel justified in expressing the opinion that this Enterprise is one of promise, and well worthy the attention of any one who may feel disposed to seek a change of climate and country, or who would wish to embark in any adventure which might present a fair prospect of securing an early competence from a small investment of money and labor.

The Calaveras Chronicle urges the importance of having manufactories established in the mountain regions for the purpose of making wines. It says:—

If a company were to put up a wine press and cellars in some central place in this county, it would not be many years before a sufficient quantity of grapes would be grown to afford us a constant supply. Not only our ranchmen, but the miners could each have their patch of vines, from one to five acres, and, in the aggregate, produce tons of luscious large grapes. If business men would turn their attention to making wine instead of beer, soda water, &c., we would soon have brands of California wine manufactured in the mountain towns which would vie with the most celebrated now known in the market.

SINALOA SILVER.—The Cosmopolitan, published at Mazatlan, speaks quite highly of the silver mines in the State of Sinaloa. Mr. Joseph Capprise, of this city, has recently purchased some mines in that country, which are said to be good. He brought a ton of specimens with him on the Oregon.

## VALUE OF MACHINERY IN WAR.

As the battery of the iron-clad steamer Montauk weighs thirty-five tons, it is interesting to know that her entire crew will be less than seventy men. An old frigate required a ship's company of three hundred sailors and landsmen, and a guard of marines. These would man four of the new fashioned ships, and while every 32-pounder on the frigate required the labor of 12 men, the 450-pounder of the Montauk is easily moved by four. This fact affords another remarkable illustration of the adaptedness of Yankee ingenuity to any emergency which may be presented. Without the aid of the newly invented machinery for working ship's guns, it would be utterly impossible to place such huge monsters as 450-pounders with the other necessary smaller armament, on the deck of any ordinary sized vessel, and with these the number of men and supplies which would be requisite to work guns even on the most improved principles heretofore in use.

SILVER DISCOVERY IN PENNSYLVANIA.—Quite an excitement has recently been created in Butler county, Penn., by the discovery of a silver lead on the farm of Z. Cooper, of Slippery Rock. In relation to this discovery the Pennsylvania Herald asserts that the existence of silver in this locality was known by the French during their occupation of Fort Du Quesne—Pittsburg—prior to the Revolutionary war. Crucibles and other apparatus have recently been found in the vicinity which aided the recent prospectors in their search, which has finally resulted in a re-discovery of the mine. Mining operations are to be immediately commenced and works erected for the reduction of the ores.

DISASTERS AND LOSSES AT SEA.—The number of marine disasters, which have occurred to shipping engaged in the California trade, during the year 1862, as given by the San Francisco "Mercantile Gazette and Prices Current," is 112; 41 of which have been total losses. The amount of property thus sacrificed foots up at \$6,518,189. The losses of the previous year were \$1,722,247.

BUSINESS LOSSES.—From the reports of the mercantile agencies it appears that there were fewer failures in business in the Northern States, during the year 1862, than in any other year since 1830. The following table tells its story:

	Number.	Liabilities.
Failures in 1861.....	5,935	\$178,532,170
Failures in 1862.....	1,659	23,649,300

This is a good exhibit. It is also worthy of notice that unembarrassed business firms, especially those in the cotton trade, never made money as during the past year.

PUTTY.—Notwithstanding the insignificance which usually attaches to this article of merchandise, it sometimes figures as an important item: For instance.—The Virginia City Union says the amount of putty used about the Gould & Curry mill has been enormous—not less than two tons is said to have been used in putting in lights and filling crevices, preparatory to painting, in and about that huge establishment.

LIABILITY OF CAR DRIVERS.—A case which may soon have importance in San Francisco, has recently been decided in New York, in which the Court held that children of tender years, who may be injured while upon city railroad tracks, cannot be deemed guilty of negligence. In case of injury, therefore, to such persons, the sole responsibility rests upon the driver, who, having the ability to stop the moving car, does not do so.

A PRINTER IN LUCK.—John Heckendorn, a resident of Tuolumne county, has recently discovered a quartz lead, which prospects \$879 to the ton, being rich in both gold and silver. What proportion of the lead prospects at the above rate, we are not told; but, from all accounts the vein appears to be rich, and affords a fact of rare occurrence—a printer in luck.

BEARING.—It is intimated in Washoe mining circles that the El Derado Company has been subjected to a most extensive and determined system of "bearing" during the past two or three months, and that the advertisement of the loss of 500 feet of its stock, as advertised in the Sacramento Union is an essential part of this operation.

UNSUITABLE READING FOR THE ARMY.—The Chaplain of the 2nd Massachusetts Regiment, in giving some good advice in regard to donations to the soldiers, thus humorously sketches the kind of books and tracts that worthy people send, in the ignorance of their zeal, to the camps and hospitals:—

Gifts—we come to that—are sometimes useless. I have before me a lot of tracts addressed to sellers of ardent spirits; that business is not carried on by our men. I have had a quantity addressed to distillers; but we have no distillers. And tracts to Sunday school children, on their behavior in Sunday school, which is of another meridian. And tracts to Sunday school teachers on the preparation of their lessons, or how to greet their classes, and on visiting their pupils—which is a work adapted to places where there are children. And tracts on dancing—a fault to which there is little liability—as I remember but one instance, and I was glad when that took place—on the ground, closing at tattoo. I could multiply the list, but you have specimens. What do we want of the unsaleable lumber taken from cobwebbed shelves of some institutions glad to get rid of it—but reckoning it at the usual price in their demands for more contributions? Or of bundles of worn out Sunday school books? Or of piles of volumes of some Christian truth adapted to certain states of mind, of which ten copies are enough for a year? Or of tracts attacking Catholicism, to distribute which, even by chance, would effectually destroy all influence with many men, even if a chaplain was fool enough to suppose it his business to try to make Protestants—which tracts I have carefully put into the fire?

Again, many bundles of good reading are mere heaps of duplicates of what has already been widely circulated. Societies cannot tell what has been distributed, and they glut the market with some particular work, or volumes come to be thrown away the first march.

Or works which excite only ridicule. For instance here is a little book entitled "Valuable Hints to Soldiers," is used in Cornhill. It tells what a soldier needs: A "Bible;" no he does not; he needs a Testament. A "cheap portfolio of —;" won't any other portfolio do? "A filter," of which he disengages the tube to smoke through. "Three flannel undershirts, ditto drawers, four or five pairs of woolen socks!" I wish the man who wrote this had to march the 800 miles our men have, with such a load on his back. Then it tells us that the soldier "should never sleep at night in the flannel shirt, drawers or socks worn during the day." How, when off on picket duty one night in two or three? How, when, at the close of a march he is too tired to do anything? "No one should on any account be in wet clothing." Suppose he bivouacs in the rain, as we have over and over again? Suppose he changes, and gets out again immediately? "Blankets must be aired in the morning." Of course, when up before daylight to march on, with just time enough to pack one's knapsacks. "Soup may be omitted one dinner, and beef at another." How many courses do soldiers have? They are glad enough to get one article, even if they get down to green corn, as we all did on the Rappahannock. "Never be afraid of good beef." No, nor of turtle soup or blanc mange. "An entire meal should never be made of beans." What will he eat then, when beans are the only dish? In certain cases "increasing" the quantity "of vegetables." He can't increase it, especially as two-thirds of the time in marching he does not have any. Soldiers laugh at such directions. It may be a very good book, but it does not suit the latitude of a regiment that has been out a year and a half.

A COMPANY is being formed in this city to raise trout by artificial means. They propose to create a trout pond near the Chrystal Spring House, San Mateo county, and import trout spawn from Lake Bigler.

MINING ACCIDENTS.—The mortality from accidents in coal mines may be taken as follows: In Prussia, 1.89 per 1,000 persons per annum; Belgium, 2.8; England, 4.5; Staffordshire, 7.3.

INTERIOR TREASURE MOVEMENT.—According to the Price Current, the receipts of treasure in this city, from the interior during the ten days prior to Thursday last, were about \$920,000 in uncoined treasure, and \$230,000 in coin. About \$121,000 was received from the Gould & Curry Mine.

A BIG DIVIDEND.—The dividend declared by the Gould & Curry Mining Co., on the 26th inst., is \$100 per foot, and the stock is now held at \$3,250 per foot—an enormous advance on rates sixty days since.

MINING SUIT.—The Hale & Norcross Company commenced a suit in the District Court, Virginia City, on the 17th ult. vs. the North Potosi, for possession of certain mining ground. The former suit was to quiet title—the present is for possession of a certain "drift," now held by the North Potosi Company.



# MINING AND SCIENTIFIC PRESS.

## SAN FRANCISCO MINING NOTICES.

**Burning Moscow.**—Shares of this Company, in arrears or assessments will be sold at auction, Feb. 9.

**Baltimore America Consolidated.**—An assessment of 50 cents per share was levied, Jan. 5.

**Savage.**—An assessment of \$35 cents per share was levied, Jan. 7.

**Hawley.**—An assessment of 25 cts. per share was levied Jan. 5, payable in 30 days.

**Cole S. M. Co.**—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

**United States M. Co.**—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

**Sierra Nevada S. M. Co.** levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

**Lady Bryan.**—An assessment of 70 cts. was levied, Jan. 3, payable on or before Feb. 16.

**Ida G. & S. Co. (Russ District)**—An assessment of \$1 was levied, Jan. 14.

**Henry Martin G. & S. M. Co.**—"Thomas Wallace, Trustee," gives notice that whereas certain parties illegally claiming to be Trustees of this Company, have changed the name of the Corporation to the North Star G. & S. M. Co., and illegally elected officers for the same, the public are cautioned against such acts, etc.

**RED, WHITE AND BLUE G. & S. M. Co.** levied an assessment of 25 cts per share, payable on or before Feb. 1st, office cor. Pine and Montgomery Sts.

An assessment of \$35 per share was levied Jan 6, payable immediately, at office, No. 712 Montgomery street.

**Iona Copper Mining Company.**—The annual meeting of Stockholders for the election of officers, will be held, Jan. 23, at office, No. 502, Montgomery street.

**Live Oak Copper Co.**—The Annual Meeting of Stockholders for election of Trustees, will be held at Office, in Montgomery Block, Feb. 2, 1863.

**Coso Silver Mining Co.**—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

**Mina Prieta S. M. Co.**—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

**Savage Mining Co.**—The Annual Meeting of the Stockholders of this Co. will be held at Office, 712, Montgomery St. Jan. 13.

**Union G. & S. M. Co.**—The regular quarterly Meeting will be held, at Office, 410, Montgomery St., Jan. 19.

**The Madison G. & S. M. Co.** advertise names of parties who are in arrears for assessments, and give notice that their stock will be sold on the 29th day of Jan. unless said assessments are previously paid.

**Franco-Americano S. M. Co.**—The following persons were elected officers at the meeting of trustees, Dec. 26th—Chas. F. Galan, *President* and A. S. Gould, *Secretary*. The office of this Company has been removed to No. 528, Clay street, Room No. 2.

**Central Silver Mining Co.**—The Annual Meeting for the election of Trustees will be held Jan. 13, at Office, No. 712, Montgomery street.

**Lady Bryan G. & S. M. Co.**—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

**Desert Mining Co.**—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

**Wide West Mining Co.**—The Secretary of this Company publishes an important notice to Stockholders, in the daily papers.

**Reese River Mining Co.**—Ten cents per share has been levied upon the capital Stock of this Company, payable Jan. 14th.

**San Francisco S. M. Co.** have laid an assessment of \$25 per share, payable on or before Jan. 1st, 1863.

**Pacific Quicksilver Mining Co.**—Assessment No. 3, of \$1 per share was levied, Dec. 22, payable immediately.

**Keystone Copper Mining Co.** advertise for proposals to purchase or treat 3d quality copper ore. Proposals received till Jan. 15th.

**Mammoth Ledge Mining Co.** give notice of an assessment levied and payable on or before Jan. 13th. Also that the first annual Meeting for the election of Trustees will be held at office, Jan. 17th.

**Hale & Norcross S. M. Co.** have levied an assessment of \$5 per share payable on or before Jan. 26th.

**MEREDITH GOLD & SILVER MINING Co.**—An assessment of two and a half dollars per share (five dollars per foot) was levied by this Company, Dec. 11th, payable immediately, at office, 712 Montgomery St.

**BULLION G. & S. M. Co.**—The Stockholders are notified that they will hear something to their advantage by calling at the office of the Company, cor. Pine and Montgomery Sts.

**EMMETT G. & S. M. Co.**—An assessment of twenty-five cents per share was levied, Nov. 21st and is now due, and payable at office 326 Clay St.

**VIBBARD G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office 326 Clay St.

**DOYLE G. & S. M. Co.**—An assessment of 25 cents per share was levied, Nov. 21st, and is now due at office No. 326 Clay St.

**CHARLES CANY MINING Co.**—An assessment of \$1 50 per share was levied on the stock of this Company, Dec. 14th, 1862, payable on or before January 14th, 1863, at office, 338 Montgomery St.

**LIVE OAK COPPER MINING Co.**—Office, Montgomery Block—An assessment of thirty cents per share was levied, Dec. 1st, 1862, payable in thirty days.

**NORTH POTOSI SILVER MINING Co.**—An assessment of four dollars per share was levied on this Company, Dec. 11, 1862, payable on or before January 16th, 1863, at office, Cor. Battery & Washington Sts.

**IOWA MINING Co.**—An assessment of Four Dollars per share was levied, Dec. 4th, payable at office 522 Montgomery St. on, or before Jan. 3d, 1863.

**JOSEPHINE MINING Co.**—An assessment of two dollars per share was levied, Nov. 19th, and is now due and payable at office No. 21 Stephenson House.

**BURNSIDE S. M. Co.**—An assessment of one dollar per share was levied, Nov. 17th, payable within 30 days, at office 712 Montgomery St.

**HAWLEY MINING Co.**—An assessment of 50 cents per share was levied, Nov. 15th, payable at once, at office 204 Front St.

**AMERICAN QUICKSILVER MINING Co.**—An assessment of one dollar per share was levied, Dec. 16th, payable at Company's Office, in Petaluma, within 30 days.—At the expiration of which time delinquent stock will be sold.

**BURNING MOSCOW S. M. Co.**—An assessment of Two Dollars per share was levied, Nov. 25, for the purpose of defraying expenses of steam pump and machinery now being erected to drain the mine. Prompt payment is requested at the Company's office, corner of Montgomery and Jackson Sts., to Jos. P. Nourse, Sec.

## WASHOE MINING NOTICES.

**Martin White.**—An assessment of 20 cts. a share was levied, Jan. 2.

**Oriental G. & S. M. Co.**—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and C St., Virginia City.

**Norman S. M. Co.**—Middleton & Sons, No. 40, Montgomery Block, will sell delinquent stock of this Company, February 16th.

**Baltic Mining Co.**—Notice is given of an adjourned sale of shares in this Company, to take place off the ground, Jan. 31st.

**Progress G. & S. M. Co.**—An assessment of 20 cents per foot was levied, Dec. 27, 1862, payable forthwith.

**Sweezy Co.**—Washington Ledge.—An assessment of \$10,000, being \$5½ per foot—was levied on the stock of this Company, Dec. 28, payable at the Secretary's Office, Medan Building.

**MINERS' MEETING.**—At a meeting of the shareholders of the Siegel Mining Company, it was resolved that a meeting be called of all the miners of the Siegel Mining District, for the purpose of making laws by which said District may be governed, and that said meeting shall take place on the 15th day of January, 1862, in said Siegel District, in or near a certain place better designated as the Siegel Mining Company's Cabin.

**Caution.**—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

**Ashland Co.**—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

**Eldorado G. & S. M. Co.**—An assessment of one dollar per share was levied, Dec. 31, 1862, payable, Jan. 22, 1863, to the Secretary, at corner of Montgomery and California streets, or to the Superintendent at Virginia City.

**La-Plata Oro Co.**—Gold Hill District.—An assessment of two dollars per share was levied, Dec. 26, payable at once,

at Office of the Secretary, Court-house Building, Virginia City.

**Texas Co.**—Tennessee Ledge.—An assessment of 25 cts per foot was levied, Dec. 22, payable on or before Jan. 21 1863.

The Regular meeting of the Company for election of officers, will be held at the Comet Saloon, Virginia City, on Saturday, Jan. 21.

The North American Co., Gold Hill, will sell at auction Jan. 31, stock of shareholders delinquent in payment of assessments.

**MARTIN WHITE MINING COMPANY.**—An assessment of ten cents per foot has been levied, payable to the Secretary, at office on C Street, Virginia City,

**THE SWEENEY Co.** Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

**POORMAN G. & S. M. Co.**—An assessment of Five Dollars per share was levied, Nov. 9th, and another of Ten Dollars per share, Nov. 21, payable at once to the Secretary, R. J. Mitchell.

**COLEDONIA TUNNEL AND MINING Co.**—An assessment of Thirty-two Dollars per share was levied, Dec. 8th, payable immediately to the Secretary, Martin White.

**THE CHIMNEY ROCK Co.**, lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Beach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

**LA CROSSE MINING Co.**—An assessment of \$1 25 per share was levied, Dec. 8th, payable at office 73 C Street, Virginia City.

**HAWK EYE SILVER MINING Co.**—An assessment of 25 cents per foot was levied, Dec. 6th, payable immediately to S. A. Kellogg, Sec. Gold Hill.

**MOHEGAN Co.** Cedar Hill.—An assessment of fifty cents per foot was levied, Dec. 5th, payable forthwith, to the Secretary at Virginia City.

**ORIENTAL G. & S. M. Co.**—The 3d assessment of 15 cents per foot, was levied, Dec. 8th, and is payable at office, No. 31, C Street, Virginia City.

## ESMERALDA MINING NOTICES.

**THE ZENOBIA LODE COMPANY**, give notice that they claim a superior title to the Johnson Co., claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder,

## MINING AND SCIENTIFIC PRESS.

**THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.**

**THIRD YEAR! VOLUME VI.—NEW SERIES!**

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 50. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

**EWER & SMITH, Publishers,**

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



## Mining and Scientific Press.

W. B. EWER, EDITOR.

MONDAY EVENING.....FEBRUARY 2, 1863.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at Fifty Cents per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, Proprietors.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING. Designs of every description—Buildings, Sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates.

PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## LOOKING AFTER THE MINING INTEREST.

The Pacific Railroad Act grants to the Company constructing the road, all the timber upon certain lands lying contiguous to the route which may be selected, and which grant is so worded, that it may be construed so as to effectually prevent mining upon said lands, by prohibiting the cutting of timber, &c. In consequence of this provision in the Railroad Bill, Mr. Atkinson of Yuba, a few days since introduced the following Resolution into the Lower House of the Legislature:—

*Resolved.* By the Assembly, the Senate concurring, that our Senators in Congress be instructed and our Representatives requested to urge upon Congress the enactment of such a supplemental law as will guard the mining interests of this State against any such injurious construction of said grant.

The Resolution was referred to the Committee on Federal Relations, which has reported it back with a favorable recommendation for its passage. The Resolution came up for discussion on Tuesday. The mining delegations were generally favorable to its passage. The tenor of their argument was, that while nothing should be done by this State to discourage or delay the construction of the road, the utmost care should at the same time be taken to protect the mining interest, from whose decay the State and railroad would both suffer. If Congress did not mean, in granting to the Central Pacific Company the timber for every ten miles on alternate sections of land along the road, that it should be enjoyed to the exclusion of miners, would it not be well to say so in a Supplemental Act?

It is evident from the wording of the Bill that unless the miners are explicitly secured in the right to use what timber they may need, by such a supplementary Act, the time may come, when they would be enjoined, and the mines which may be found within the territory falling to the Railroad Company be effectually placed within their absolute control. It is not sufficient that the Company should come forward at this time and explicitly withdraw all intention to interfere with the rights of the miners. If the Company is sincere in such denial, it can have no objections to having the matter clearly defined by Legislative enactment.

P. S. Since the above was in type the Resolution has come up in its turn, as the Special Order for the day and been lost by a vote of 32 to 34.

**THE OCEAN STEAMERS.**—M. O. Roberts advertises the following vessels as belonging to his opposition line of steamers from New York to San Francisco: Illinois, 3,000 tons; Empire City, 2,000 tons; Moses Taylor, 1,500 tons; America, 2,000 tons; and the new steamship Bonaparte, 3,000 tons. The Moses Taylor sails on the 11th instant.

**THE P. M. S. LINE.**—The Pacific Mail Steamship Company advertise the Constitution to sail on the 11th instant, and the St. Louis on the 21st. The Sonora sailed on Saturday. All the above, on both lines, are well built and substantial sea going steamers.

## HUMBOLDT NOT A FAILURE.

An unfavorable impression with regard to the value of the Humboldt Mines has been created in this city, within a few days past, by an unconsidered item which appeared in a late number of the Territorial *Enterprise*. The item in question was to the effect that two mills had recently been started in that district—had crushed rock from several of the principal ledges, with results of the most meagre description. It was stated that ten tons of ore from one of these ledges, supposed to be the richest in the district, yielded nothing more precious than lead or antimony. The substance of the item under its proper credit, was transferred to the columns of our last issue. Since that time we have conversed with parties from Humboldt, from whom we learn that the item in question, was entirely without foundation. The *Enterprise* has also exonerated itself in the premises by naming its authority.

No such amount of rock, as that named has been crushed from any one lead in Humboldt, up to latest advices, except from the "National," which is a gold lead and contains no appreciable quantity of either antimony or lead, or, we believe of silver—gold being its only return.

If the Humboldt Mines are to result in a failure or even anything approaching to a serious disappointment, the fact has yet to be proved. It is still confidently believed by those best informed, that this district, when it comes to be fairly developed, will prove to be quite as rich as Virginia City, or any other place.

LATER.

Since the above was put in type we have received the *Enterprise* of Jan. 27th, in which the "local" of that paper reiterates his previous assertion with regard to the crushing with poor results, of a quantity of ore at one of the Humboldt mills, and says:

\* \* A correspondent of the Sacramento *Union* admits the crushing, but accounts for the meager return on the supposition that the rock must have been of a quality inferior to the general average. \* \* A correspondent of the *Bulletin* also acknowledges the crushing, and explains the unsatisfactory result by saying: "Dodge & Co., of the Sheba Mill, have been experimenting upon the best manner of saving the metal, and it will be shown early in the spring that the mines of the Humboldt and Reese Rivers are as rich as any yet discovered." Another correspondent of the same paper, of the same date, likewise admits the working of the rock. His explanation of the causes of the failure, however—for a failure is not denied—differs somewhat from the avowals of others. He says:

"I am informed by Mr. Dodge, of the firm of Dodge & Co., owners of the Sheba Mill, situated in Star Canon, that in the process he first used, he found nothing in his amalgam, but found \$500 per ton in his stampings. Mr. Dodge also informs me that the Humboldt mines are rich beyond all calculation. I also have the vanity to think that I know as much of the Humboldt mines as any one, have re-visited these mines '61, and examined probably as many leads as any one in the Territory, and, so far as my experience goes, I fully concur with Mr. Dodge. The idea that assays are worth nothing is simply ridiculous. If they are to go for nothing, why not work rock that won't assay a red as well as rock that assays rich?"

The *Enterprise* adds:

"We leave the reader to reconcile these conflicting authorities, and weigh the result against our simple statement."

Being satisfied in our own mind that "somebody had blundered," we called upon Mr. Dodge, of the firm of "Dodge & Co.," proprietors of the Sheba Mill, who is now in this city, but who was in Humboldt at the time the mill was started. He confirms what we have learned from various other sources, that only the small quantity of rock, already alluded to, has yet been crushed from the Sheba vein.

In relation to the extract above quoted from the *Bulletin*, where the information purports to have been derived from Mr. Dodge, that gentleman explains as follows: The information was given to the *Bulletin* correspondent in a private conversation, and the "processes" alluded to were simply hand processes, conducted in this city, and to the extent of only three pounds of ore at a trial. The object of these experiments was simply to arrive at some correct and reliable method of treating the ore on a working scale at the mill. These results have, thus far, resulted in fully sustaining the preconceived ideas with regard to the value of the mine. If the "local" of the *Enterprise* will read the above extracts from the *Bulletin* attentively, he will see that he was not justified in inferring that those "processes" were tried at the mill. The writers, evidently did not intend to convey any such idea. The last paragraph of the latter quotation would seem to settle that matter for one of them at least.

With regard to the correspondents of the *Union*, we

would simply say that the proprietors of the mill, and of the lead, and their workmen all unite in the assertion that not a full ton of rock has yet been crushed at the mill, and not a pound of what has been crushed, has been amalgamated by any other than a hand process.

## Mining Operations about Virginia City.

Mining operations in and about Virginia City never presented a more favorable aspect than at the present time. In the entire range of nearly three miles from Cedar Hill to Gold Hill, along the line of the Comstock Lode, nearly all the companies have reached their leads, and in a short time many companies about which little is now heard, will be taking out rich rock. At Gold Hill, the damages of the late slide have been fully repaired and the claims put in good order for working. The Mexican Mine is said to have struck ore in their deepest shaft which, when assorted, is worth from \$7,000 to \$8,000 per ton. It is being prepared for shipment to England. The Ophir, which has recently been inundated with water, is recovering from its bath, none the worse for the drenching. It is more than probable that the reservoir from which this water has been drawn will prove to be a rich vein of ore. The Gould & Curry is now fairly in successful operation, though not yet to its fullest extent. The dividend declared on the 26th ult.—\$100 to the foot—is sufficient evidence of its richness. When the great tunnel which this company is driving up to strike the lead at a depth of 700 feet shall meet the vein, great developments may be expected. The Caledonia tunnel, three-fourths of a mile below Gold Hill, is being pushed forward with the utmost vigor. This tunnel it is expected will intersect ten distinct leads. It is now in nearly 2000 feet, and has passed through one lead, from which a stream of some 60 or 75 inches of water was flowing at last accounts.

The Ophir Company, according to the Territorial *Enterprise*, commenced gaining on the water in their mine on the 22nd inst.—not a moment too soon. The highest rise of the water was 80 feet, and reached within five feet of the 5th gallery. Had it entered that gallery, much damage would have been done. As it was, the work in the mine was not seriously interfered with as it was mostly done in and above the 5th gallery. The Mexican Company did not suffer to any great extent. The Central and California were a little troubled by the seepage. The mines above the Ophir of course are greatly benefited by the disaster—the La Crosse and Burning Moscow were particularly benefited. It will probably be some days yet before the water in the lower portion of the Ophir mine will be entirely drawn off. In the mean time operations in the mine will not be seriously interfered with.

In the Sullivan district several good leads have been developed. In the Palmyra District good prospects are reported. In the Spring Valley District, the mills are getting out \$20 and \$30 per ton, which though not large is nevertheless sufficient to encourage further operations. The Rock Point Mill has recently started with 40 large stamps, and two large breakers, crushing 60 tons per day.

The Territorial *Enterprise* says that a large number of mining companies are about to incorporate under the Territorial laws—among them, the Beach & Paxton, the Birdsall, the Oriental, the Pride of Washoe, the Zouave, and the York. That paper thinks that within six months a majority of all the companies of positive value, will incorporate there. It further states that an attempt will be made by a number of leading companies to have that portion of the Territorial Incorporation Act declared unconstitutional which requires the removal of the offices of California incorporations to that Territory.

**THE COPPER SHIPMENTS.**—Mr. Shields has shipped 54 tons of ore by the ship Peruvian, for the Swansea market. This ore is from the mine of the Newton Company, Amador County, and is of an excellent quality. It is expected, that when the roads open in the Spring, large shipments will be made from that District.

The order of Court for a survey of the El Dorado works granted to the Gould & Curry, embraces also a survey of the Rogers and Vanderbilt claims. These surveys, the *Enterprise* thinks, point to a general settlement of boundaries between the litigants.



## GENERAL MINING STOCK REPORT.

REPORT OF SALES  
At the San Francisco Mining Stock Board,  
For the week ending January 31, 1863.

Names of Companies.	Total No. Shares.	Per Share.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Ophir	10,000	12	1050	1050	1050	1050	1050	1050
Gould & Curry	1,800	1	300	300	300	300	300	300
Central	1,800	1	300	300	300	300	300	300
Georgetown	1,800	1	300	300	300	300	300	300
Chollar	5,000	4	200	165	165	165	165	165
Potosi	2,500	2	400	165	165	165	165	165
Hale & Norcross	800	2	500	60	60	60	60	60
Sierra Nevada	3,000	1	300	60	60	60	60	60
Yuba	8,000	4	200	60	60	60	60	60
Burned Moscow	1,800	1	300	60	60	60	60	60
North Potosi	2,500	1	250	18	21	21	21	21
Revere, E. D.	5,000	1	500	7	7	7	7	7
Marathon	7,200	2	120	30	32	32	32	32
Charles Caney	1,800	1	180	17	18	18	18	18
Sacramento	1,800	1	300	40	46	46	46	46
Lucerne	1,800	1	300	—	—	—	—	—
Lucy Bryan	6,000	1	100	—	—	—	—	—
Savage	800	1	—	1100	1000	1180	—	1000
Iowa	—	—	—	—	—	—	—	—
El Dorado	—	—	—	30	30	40	—	35
Norton	1,400	1	—	27	30	27	16	—
Cedar Hill Tunnel	—	—	—	—	—	—	3	31
Mount Davidson	10,000	2	200	4	3	—	4	31
Wide West	1,000	1	100	25	30	300	35	35
Antelope	1,000	1	100	17	180	195	217	—
Emerald	1,000	1	100	50	55	55	57	—
Real del Monte	4,000	1	400	22	23	25	22	20
Delta	1,000	1	100	—	6	—	4	6
Utah	—	—	—	65	62	—	80	110
Silver Hill	3,000	1	—	22	23	22	22	22

## Coso Stocks.

The Josephine changed hands at the Stock Board, on Monday, Wednesday and Thursday at \$15.

Coso—changed hands on Saturday at 12 dollars.

Wallow Springs—sold on Monday at \$10.

## Mexican Mines.

Mina Prieta changed hands on Monday and Thursday at \$125 and on Friday at 140.

Los Padre was quoted on Monday, Thursday and Friday at 35.

SAN FRANCISCO, February 2nd, 1863.

## STOCK REMARKS.

Transactions in shares, the past week, have not been so active as during the week previous. Although the week closed with a contrary opinion among many, a comparison of the "transactions" of the two weeks, as reported in these columns will sustain our assertion. Prices, however, have generally ruled better, and the decided firmness of the market may be set down as the chief cause which has operated to reduce the amount of transactions. The reports from the mines are generally favorable. Many valuable discoveries are noted—some of which are equal to anything yet met with in the history of California mining. The unusually favorable state of the weather for quartz mining is exerting a marked influence on that branch of mining industry. The same fortunate circumstance seems also to have affected favorably the feelings of buyers in this city, who, during the week have daily thronged Montgomery street, in unusually large numbers, manifesting a particularly good feeling in reference to mining operations generally, but affording also, unmistakable evidence that an increasing amount of capital is held in store for investment in this important branch of business.

Ophir has rallied somewhat from last week's depression and now stands firm with more of a business than speculative attitude. The late disaster has fully eliminated, with much less damage to the mine than was at first anticipated. The work of completely draining off the water will soon be completed. The market for the week closed at \$2450 cash, and \$2500 on 60 days. The dividend for January will again be small, probably not over \$26 per foot; but holders are sanguine of the future of the mine, and look for a large dividend for February.

Gould & Curry paid a dividend of \$100 per foot on the 30th ult., and carried over a balance of \$2000 to the account for February. Shares have advanced about \$150 per foot, with but little stock offering. \$120 per foot has been offered for February dividends.

Chollar has again an upward tendency having advanced thirty-five dollars per foot from Thursday to Saturday. It is now held firm at \$130. Further advances are expected.

Potosi, which had steadily advanced to \$180, declined the past week to a larger amount than Chollar has advanced. It sold at the Board on Monday for 165 dollars and on Saturday had declined to 130. This may be considered as indicative of the termination of the Chollar Potosi suit adverse to the latter.

North Potosi has improved eight dollars which is taken as indicative of improved prospects in its suit with the Hale and Norcross.

Sierra Nevada Stocks have been largely dealt in the past week at about the usual rates.

## ESMERALDA STOCKS.

Emerald Stocks have commanded considerable attention during the week. Accounts from that district are generally favorable.

The Wide West.—An unusual amount of this stock has been placed in the market during the week, which at first caused a decline. It subsequently, however, rallied a little, and finally closed with a firm market at slightly reduced rates. About 600 feet have changed hands during the week.

Utah. Considerable excitement in this stock was caused by the report of a telegraphic order from the mine to agents here to buy largely, which they did, and as a consequence stock rapidly advanced from \$65 to 100. Holders are now asking \$110 and upwards. 327 feet have changed hands during the week at prices from 62½ to 100 dollars.

Antelope, Esmeralda, Del Norte and Silver Hill have been largely dealt in during the week, generally at advanced rates.

## TRANSACTIONS IN SHARES.

Ophir—60 shares at \$2400 per foot; 36 at 2375, 12 at 2425; 48 at 2455 00 at 2460, 240 at 2600, 10 days, 60 at 2460, 50 at 2425.

Gould & Curry—12 at \$3150, 40 at 3250, 181 days with dividend; 40 at 3250, 1st of August at 1½ per cent interest.

Chollar—20 at \$307½; 40 at 405, 20 at 410; 28 at 415; 12 at 420, 40 at 425 20 at 440.

Savage—5 at \$1200; 7 at 1175.

Potosi—10 shares at \$165; 10 at 170, 10 at 185; 14 at 190; 25 at 175; 40 at 180 50 at 185.

Sierra Nevada—25 at \$55; 25 at 57½; 10 at 60; 20 at 61½; 10 at 63; 10 at 60, 40 at 57½; 10 at 60; 15 at 58, 20 at 57½; 10 at 60.

Burned Moscow—10 at \$70; 10 at 67½; 50 at 65; 6 at 67½; 28 at 62½; 40 at 61.

Charles Caney—20 at \$22; 18 at 20; 25 at 21; 25 at 22.

Meredith—20 shares at \$30; 10 at 32½; 30 at 25; 20 at 35.

Hale & Norcross—10 at \$505; 5 at \$570½.

Daney—20 at \$25, 40 at 235.

North Potosi—19 at \$22; 12 at 22; 12 at 22½; 50 at 25; 30 at 23.

Norton—10 at \$25; 25 at 27½; 30 at 16; 24 at 50, 10 at 28.

Burned Moscow—20 at \$15.

Mount Davidson—100 at 4½; 50 at 5.

Sacramento—10 at \$35; 20 at 31½, 25 at 40.

Union, Russ District—20 2½, 200 at 2½; 50 at 3.

Burned Moscow—10 at \$65; 16 at 65; 4 at 62½; 8 at 62½.

## ESMERALDA DISTRICT.

Wide West—100 shares at \$200; 100 at 325; 100 at 350; 200 at 340, 400 at 320 to 375. Sanborn & Co. quote at 305.

Antelope—20 at \$210; 20 at 205; 15 at 200; 10 at 197½; 7 at 205; 10 at 200 8 at 207½.

Real del Monte—50 at 25; 25 at 25; 25 at 27½; 50 at 26; 38 at 28.

Silver Hill—60 \$22½; 20 at 23; 16 at 24. Quoted at 25.

Garibaldi—20 at \$25, 5 at 27; 15 at 24.

Esmeralda—10 at \$57½, 10 at 60; 6 at 57½; 5 at 61.

Utah—227 at \$70 to 95.

Delta—10 at \$5.

\* Quotations made at given rates per foot.

## COPPER STOCKS.

The Napoleon has been considerably dealt in the past week. The following transactions are quoted—4 shares at \$35; 21 at 30; 10 at 34; 10 at 35; 12 at 35; 20 at 30.

## Stocks in Virginia City.

Corrected by WIGHTMAN & MITCHELL for the Virginia City Union.

The following stocks, are in the market in Virginia City, and held at the prices annexed:

Ashtabula	25 00	American Basin Co.	20 00
Santa Fe	25 00	Hawkeye	20 00
Empire	5 00	Consolidated Cedar Hill	4 00
Santa Rita	35 00	Utah	40 00
McElree	25 00	Industrious	5 00
Zouave	10 00	North American	5 00
Belvidere	15 00	Philadelphia	4 00
Yorck	4 00	Sigol	2 00
Governor Nye	7 00	Virginia	5 00
Battle	20 00	Commercial	4 00
Peyton	—	Uncle Sam	3 00
Durgan	4 50	Bloomington	6 00
El Dorado	—	Cole	20 00
Summit	5 00	Golden Eagle	5 00
Washington	6 00	Deatur	2 50
Milton	—	Atchison	150 00
Cedar Hill Tunnel	5 00	Comet (Simpson's Park)	60 00
Hazel Green	5 00	Mohegan	6 00
Eureka	25 00	Golden Era	10 00
Laboring	11 00	Oreola	10 00
Sweezy	—	Madison	25 00
Caledonia	10 00	U. S. Tunnel	5 00
St. George	4 00	Sacramento	30 00
Mary Ann	25 00	Farquison Co. Keller Lodge	5 00
Adriatic	2 00	Monarch	20 00
Golden Gate	5 00	Irvine	5 00
		Bald Eagle	2 00

## ESMERALDA STOCK REPORT.

(The report of the Esmeralda Mining Board for the 16th ult not having been received we continue our last quotations.)

At the meeting of the Esmeralda Stock Board, held January 9th, 1863, the following business was transacted in stocks, as reported in the Esmeralda Star.

Pride of Antelope—25 shares offered at \$5.

Union Tunnel—10 shares offered at \$15.

Altova—5 shares offered at 25.

Bamboo—20 feet offered at 75—bid 50.

Strawberry—25 shares offered at 16—bid 8.

Ex. Johnson—100 feet offered at 8.

Fresno—25 feet offered at 8.

Del Norte—12 shares offered at 36.

Esmeralda Stocks offered at San Francisco valuation:

Antelope	offered at \$225 00	Wide West	offered at \$410 00
Garibaldi	10 00	Malta Esmeralda	45 00
Silver Hill	20 00	Utah	45 00
Delta	8 00	Real del Monte	25 00

## TRANSACTIONS OF THE WEEK.

240 feet of Bamboo sold at \$40 per foot.

65 shares Strawberry sold at \$10 per share.

100 feet Golden Age at \$5 per foot.

25 shares Peru, at \$5 each.

20 feet Bodie Bluff Consolidation, at \$12.

Application for Examination and Classification was received from the following Companies:—Garibaldi, Ural and Julia Elizabeth  
J. B. BLANCHARD, Secretary.

## WASHOE STOCK REMARKS.

[COMPILED FROM THE DAILY TERRITORIAL ENTERPRISE.]

Monday, January 19.

Fifteen feet of Hazel Green sold to day for \$5; 15 feet Oriental, at \$4; 15 feet Zouave, p. t.; 11 feet Birdsell, at \$17; 10 feet Pride of Washoe, at \$10. The latter is a new claim back of the Virginia and on the south side of Keystone Ravine, in this District. We know nothing of its value, except by report; but quite a number of transfers in the stock have taken place lately. El Dorado is offered at \$50 @ \$55; Union, at \$12 @ 15; Hazel Green at \$5; Oriental, at \$4; Zouave, at \$8 @ \$7; Ashland, at \$8; Penn, at \$4 @ \$5; U. S. Tunnel stock, at \$2,500 per share; Cedar Hill Tunnel, at \$4. A new strike of valuable ore in the Yellow Jacket is reported to-day.

Tuesday January 20.

But two or three sales were reported to-day, and nothing of importance was noted in the way of discoveries. The reported strike of valuable ore in the Yellow Jacket, mentioned yesterday, is correct.

An order for a survey of the El Dorado mine has been granted by Judge Mott to the Gould & Curry, and the latter are about to be proceed against by a company claiming in front of their ledge. Something should be done at once to deliver the claimants in that neighborhood from the snarl in which their mining possessions are involved.

Twenty-five feet Pride of Washoe were sold to day at \$20 Per foot; 10 feet Oriental at \$3 50; 15 feet Hazel Green at \$4 50. Other figures remain, without an exception, at the quotations of yesterday.

Wednesday, January 21st.

Very little done in Stocks to-day—people generally too much engrossed in sleighing. A sale of 10 feet of La Crosse reported at figures which the "Enterprise" esteems doubtful, but quotes at \$17 to 20. Ten feet of Sacramento is quoted at 47, and 15 feet of Gellor at 5½. These transfers embrace the entire sales of the day.

THURSDAY EVENING, Jan. 22nd.

Reports from San Francisco are inspiring. The published records of transactions below do not reflect the intensity of the general disposition to invest in the mining stocks of Nevada. Everything augurs favorably for the coming Spring. Inquiry for Norton, Rogers, Allen, North Potosi, Sacramento, and Savage, at San Francisco quotations reaches us from the Bay, but stocks seem to be held somewhat more firmly than in California.

Few sales are reported to-day. El Dorado is offered at \$50 @ \$50; Birdsell at \$20; Pride of Washoe at \$15; Governor Nye at \$5; Wellington at \$10 @ \$12; Oriental at \$3 50; Hazel Green at \$6; Dunn at \$4 @ \$5; Sinaloa at \$7 50 @ \$8; Fairview at \$20; Cedar Hill Tunnel at \$4; U. S. Mining Company at \$200 per quarter interest; Zouave, \$6. These are the lowest rates at which most of the stocks mentioned can be obtained, and amounts in market are limited.

Friday, January 23rd.

There has been some activity in the Stock Market to-day. Inquiry was made for Sacramento at \$45 to 50—for Beach & Paxton at 30—for Birdsell at 17 to 19—North Potosi at 10 to 12 and for Savage, Rogers and Potosi at San Francisco quotations. Holders, however, are disinclined to part with their stock in these claims at prices mentioned. Gold Hill is engrossing much attention; and a number of claims which have slumbered for two years are now coming into favor.

Saturday, January 24th.

The week closes with much firmness in all second rate Stocks. The transactions of the week, however, do not foot up largely, although the rates obtained are generally satisfactory to buyers.

Sacramento shares cannot be bought at this time in Virginia City for less than \$75 per foot. San Francisco quotations to the contrary, notwithstanding.

The Argentine District which has been pretty much abandoned for the past 18 months is again finding favorable mention. A new claim called the Vulcan, the croppings of which assay well, seems to be the favorite. Some considerable prospecting is being done and valuable ore may be found. A few of the claims in Pahya are held at large figures. The Summit still continues to attract some attention. The Orizaba has been sold lately for \$150 per foot. Sales to-day have been light.

MONDAY EVENING, January 26.

Wild reports from Reese river have been in circulation to-day. Ore from that region, assaying \$20,000 to the ton is exhibited, and many are preparing for an early visit to the new mines. We trust the country may prove as rich in gold and silver as the wildest dream of the prospecting enthusiast, but we have little faith in these reported assays. A word to the wise is sufficient.

The sales to-day have been limited. Transfers of Zouave were made at \$6, of Waterhouse at \$3 50, of Birdsell at \$18 50, of Allen at \$45, of Sacramento (5 feet) at \$60.

We quote U. S. Mining Co. at \$2400 per interest; Granada Tunnel Co. at \$1,000 do; El Dorado, \$50 @ \$55; Wellington, \$12 @ \$15; Hazel Green \$4 50; Utah, \$40 @ \$45; Sacramento \$60 @ \$65; Oriental, \$3 50; Pride of Washoe, \$15 @ \$20; Santa Rita, \$35; Cedar Hill Tunnel, \$3 50; Dunn, \$4; Sinaloa, \$7 @ \$8; Union, Gold Hill, \$8 @ \$12.

## MEXICAN MINES.

Intelligence from the Mexican Mines in Sonora is highly favorable. The Mina Prieta is fast moving its machinery (which is of a very superior class) to the mine. It will probably be in operation inside of three months. This is pronounced one of the best mines in Mexico.

The Musidora, upon the same vein, has its tunnel 90 feet, with about 50 feet more to run before reaching the vein. They expect to strike the vein in a little over two months.

The Brouces Mine is receiving additional machinery, which they expect to have running in about four months.

The machinery for the Dios Padre, at Alamos, is most properly now upon the ground.

Additional machinery has also gone to the Guasapuxa Mine on the edge of Chihuahua. Capt. Frederick Griffin of this city has recently taken a large interest in this Mine, it now being entirely owned by Americans—Griffin, Hurd & Co.



## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will accept the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual lost was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

## For parting silver from gold when gold

is below 300-1000ths. fine.....3cts per oz.  
" from 300-1000ths. to 750-1000ths fine. 7cts " "  
" " 750-1000ths to 950-1000ths " .14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
301 " 500, 7cts, " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

## CORN AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skillful and scientific Professors of Philadelphia, and having made this branch of surgical science my speciality for nine years, enables me to operate skillfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can recommend you with confidence to the citizens of San Francisco, as one of the most skillful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertions in the new and growing city of the Pacific.

## THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hacknied course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone;" "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonable.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.

## Dr. Van Zandt,

### Consulting Physician and Surgeon,

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity Made Subservient for the Cure of all Nervous and Spinal Diseases.

**THAT THIS PRINCIPLE**, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanted by physicians, to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

## Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting and in order that the tissues of the body should be susceptible to remedies, agents we must first restore and

## Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do, most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

## No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRICAL excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

## To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct views of the origin of all their maladies. Ladies can consult him with entire confidence, as he is no speculator upon human ills—but is proving himself the only member of the legitimate profession in California who is really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately attuned and sensitive organism, together with their great sympathetic life, renders him doubly able to assuage those silent complaints which they bear so patiently and so long. No social seclusion need longer afflict our home circles; for he can arouse the stricken energies; restore the wondrous totality of the body; awaken the melancholic and desponding; arrest those drains which cause so much anxiety; cure those protean maladies which have so long

## Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength; extreme debility and listlessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exciting the Electro-Galvanic current, together with his remedial measures, which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore you to usefulness, and spare you a blessing to your family and to society.

## All the World Over

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is as necessary to restore the ELECTRO-GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and verified by hundreds of patients; so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unassailable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, mental and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or caustic habit of body.

## None Need Despair of Relief.

If you have ailers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—depression of spirits which weigh you down—wakefulness that keeps you sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you a radical removal of all bodily and mental infirmities, within the scope of science and man to remove.

## The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made these afflictions an especial study, and that he is the only Surgeon on our State, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataract, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29—3m

C. W. THOMAS, Plating Mill, California street, facing the Mission R. R. Depot, San Francisco. ml

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts. ml

DR. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner. ap16

KELLY & WADE, Importers and Dealers in Paints, Oils, Turpentine, Etc Nos. 105 & 107 California street, Bet. Davis and Front. ml6

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T. my23

PALMER, HANSCOM & Co. Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market. my23

ORIO HOTEL, Fire-Proof Brick Building, No. 49 K street, Bet. Second and Third, Sacramento City, Jas. Smith, Prop'r. my20

A. S. ROSENBAUM & CO.—Importers of pure Havana Cigars, Tobacco etc., corner Clay and Battery, 25 and 27 Cedar street, New York.



## LOWER CALIFORNIA

## Colonization and Mining Company.

THE AGENTS SENT TO MEXICO BY the above Company having returned per steamer Oregon, after having secured a tract of upwards of

**125,000 Acres**  
OF RICH AGRICULTURAL LAND,  
and a valuable silver Mine,

The Company is now prepared to furnish exact information to Colonists who have already engaged, or those about to engage in this

## SPLENDID ENTERPRISE.

It proposes to send a vessel about the first of March next, and there being but a limited number of shares

NO TIME SHOULD BE LOST BY COLONISTS.

## Farmers Miners and Mechanics,

With families are particularly invited by the authority of the Territory. The land selected, in point of fertility of soil, is not excelled on the Continent. The climate is unsurpassed in the world. The richest Silver Mines known to exist in the Territory are in the immediate vicinity and bordering on the agricultural lands of the Colony.

N. B. Bear in mind that a share costs, at present, only \$200, which entitles the holder to free transportation for self, family, and articles of personal use and an equal share in the land, the Company's Silver Mine, etc. the whole enterprise, for the mutual benefit of members only.

Full information can be had, and Mineral and Cotton Specimens seen, by applying at the Office of the Company, North-west corner of Clay and Front Street.

## BOARD OF TRUSTEES.

A. G. RANDALL, President.  
Capt. JOHN H. BELL, V. President.  
O. F. GEHRICKE, Secretary.

Trustees—L. F. LOVELAND, ISAAC LABOR, M. D. MATTHEWSON, H. C. PATRIDGE, I. ROWELL, M. D.  
Committee on Survey—E. RICHARDS, Special Agent;  
Capt. R. C. ANDREWS, Surveyor.

## RASCHE &amp; SONS,

131 Montgomery st., bet. Bush & Sutter,  
SAN FRANCISCO.

## WHOLESALE AND RETAIL DEALERS IN

Pianos, Sheet Music  
ITALIAN STRINGS,

And Instruments of all kinds. Also,

Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;  
C. MEYER, Philadelphia.  
T. GILBERT, Boston;

Whose Pianos they have always on hand, for sale or rent

## PIANOS FOR RENT.

New Music received by every steamer. Now Music published. Music assorted and bound in the best style. A liberal discount made to the Trade and to Professors of Music.

## WASHOE

## Stock Exchange,

N. E. cor. Montgomery & Merchant sts.  
SAN FRANCISCO.

## L. W. NEWELL &amp; CO.,

Buy and sell Washoe, Emeralds and other Mining Stocks and Securities.

## DEVOE &amp; COS.'

## STEAM ENGINE

—AND—

## MACHINE WORKS,

Corner Market & Fremont streets,

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILLS, Irons, Flour Mills, Quartz Mills etc., etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT Cutting. AGRICULTURAL MACHINERY made and repaired. Replicate parts of Threshing and Reaping Machines and Threshing Teeth made to order, on the most reasonable terms.

Steam Engines and Boilers constantly on hand, and for sale cheap. Screw-Cutting and Turning Lathes for sale. DEVOE & CO.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots which are now offered for sale on reasonable terms any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mount Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wildcat mining stocks, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,  
No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office. no 13 6mo

## A. ROMAN &amp; Co.,

WHOLESALE AND RETAIL

## Book Establishment,

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darrington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Piggon on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Phillips. Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake. Ure's Dictionary of Arts, Manufactures and Mines. Weisbach's Mechanics of Machinery and Engineering. Neville's Hydraulic Formula Tables.

The title to the land is perfect.

Together with many other works in this and similar lines

Books imported to order on short notice.

A. ROMAN & Co.

417 & 419 Montgomery Street.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

## Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

## THIS POPULAR

## Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

## BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,  
Nos. 121, 123 and 125 California street.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

## Gird's Budding Knife.

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentee), San Francisco. sep1-3m

## The Occidental Hotel

IS NOW

## Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be considered equal in every respect to the first class houses of the Atlantic cities. The spacious READING and EXCHANGEROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

## News Stand,

AND A LARGE

## CABINET FOR MINERALS;

ALSO

## A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND & CO., Proprietors.

San Francisco, Jan. 1st, 1863.

## MUSIC! MUSIC!! MUSIC!!!

## A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments & Musical Merchandise

SHEET MUSIC & MUSICAL BOOKS.

GENUINE ROMAN STRINGS, &c.,

Light's New Patent Insulated Iron Frame is put into all of

LIGHTS & BRADBURY'S OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

Instrument, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

MELODEONS AND HARMONIUMS,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN,

Warranted superior to all others.

Send for a catalogue and Price List.

A. KOHLER, Agent.

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as MINING SUPERINTENDENT in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assorter of Copper Ore. He can give ample testimonies as to his capacity for the position he seeks. Apply at this Office.

## PHILADELPHIA BREWERY,

Second St. corner of Folsom, SAN FRANCISCO

## Hoelscher, &amp; Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to announce that the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

## W. T. &amp; J. GARRATT,

## City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hoses and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garrett's Patent Improved Journal Metal."

## F. G. BEPLER,

## Practical Coppersmith

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery, SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work. All orders from the country promptly attended to.

## FREDERICK KESMODEL,

## Cutler &amp; Surgical Instrument Maker,

817 KEARNY STREET.

Between Jackson and Washington streets,  
SAN FRANCISCO.

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are all uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that its movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL,

Inventor and Patentee

ap3 1f

## LABOR-SAVING

## Rock Drilling Machine,

TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE and Quarrymen. The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

## HAND, HORSE, AND STEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way.

A FOUR HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process. Address orders to

WM. W. DUNN,

Fremont street, bet. Market and Mission, San Francisco.

## LATEST IMPROVEMENT

## in Ladies' Buckles.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERICK REICHEL, Manufacturing Jeweler, 620 Merchant street, San Francisco.

## REMOVAL.

OFFICE OF THE PACIFIC METAL-Working Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent, 318 California street, near Sansome, up stairs.

## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

The question of taxing mining claims by the General Government, after a long slumber, seems to be again revived. The agitation of this subject I cannot but regard as extremely impolitic. In a vast majority of claims it is impossible to estimate their value above what they may afford to the laborer from day to day, and with most of the balance there can be no ascertained permanency or reliability of value upon which an assessment could be made with confidence or with satisfaction. A tax upon these claims can never be laid that would be just in its burdens or equitable in its results. When the sagacity and toil, the anxiety and patience, of the miner are rewarded with success, the results of that success, become the subject of taxation and the source of revenue.



## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of February, 1863.

## February 1st, Steamer Sonora.

" 11th " Constitution.  
" 21st " St. Louis.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

364 Corner of Sacramento and Leidesdorff sts.

## TO THE CLOCK TRADE.

WE HAVE RECEIVED, EX RECENT FLEET OF CLIP-PERS, a fine assortment of the

NEW HAVEN COMPANY'S,

(FORMERLY JEROME)

## CLOCKS,

Comprising all the Desirable Styles. Also a Large Lot of

## Fancy Time Pieces

OF NEW AND BEAUTIFUL PATTERNS.

We shall in future be in receipt of sufficient quantities of the above goods to supply our largely increased trade.

HAYNES & LAWTON, Agents N. H. Clock Co.  
Nos. 516 and 518 Sansome st., cor. Merchant,  
San Francisco.

Jan 26 1863

## SQUARZA'S PUNCH.

## FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR;  
FOR 1862.

## ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidesdorff street,

Opposite the What Cheer House, San Francisco.

## V. SQUARZA'S

## Punch Factory.

MR. SQUARZA IS FAVORABLY known in this State for his Anti-Diarrhoe Liqueur and similar productions, as manufactured by him. We may mention that Mr. Squarza is an fait in the chemical distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure and unadulterated with drugs or other injurious chemicals:

Run Punch,	Strawberry Punch,
Cognac do.	Whisky do.
Arac do.	Kirschwasser do.
Anti-Diarrhoe Punch,	Cocoa do.
Coffee do.	Morning Comfort,
Tea do.	Kacmuel,
Pineapple do.	Brandy Cocktail,
Aniseite,	Anti-Dyspepsia Bitters,
Kirschwasser,	Ladies' Tears,
Appetiser,	

And CHAMPAGNES of all brands.

## FULTON FOUNDRY &amp; IRON WORKS

## HINCKLEY &amp; CO.,

MANUFACTURERS OF STEAM ENGINES,

Quartz, Flour and Saw Mills; Cast iron Fronts for Buildings, Mining Pumps, and all kinds of Machinery Amalgamators, Etc.

Nos. 47 & 49 First Street,

Between Market and Mission, San Francisco.

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to iron when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.

D. B. Hinckley, Wm. E. Worth. Wm. A. Field.

## PEOPLE'S

## Steamship Line!

## CONNECTING

CALIFORNIA AND NEW YORK,  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

MOSES TAYLOR,

E. HOWES ..... COMMANDER,

Will be dispatched for

San Juan del Sur,

From Mission street Wharf.

Punctually at 9 o'clock, A. M., on

WEDNESDAY, - - - MARCH 11. 1863.

Connecting at GREYTOWN with the Splendid Steamship

ILLINOIS ..... 2500 Tons.

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers

For further information apply to

I. K. ROBERTS, Agent,  
No. 107 Washington Street, opp. Post Office.

## DONAHUE'S

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.

PETER DONAHUE.

## LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
LEWIS COFFEY J. N. RISDON.

## GREAT REDUCTION

## IN PRICES.

STANFORD BROTHERS,

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

## Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARE'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

ap161f

## TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 100), and to any kind of machinery, will Save in Transportation Material and Labor, from

25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the

Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan 10-1863

## Holiday Presents!

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

BRAVERMAN & LEVY'S,

621 Washington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. Also,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY,  
No. 621 Washington Street,  
Facing Maguire's Opera House.

Dec 29 1862

## LEANDER RANSOM,

Civil Engineer

AND

## SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

## STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-7-3m

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Patents and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,

Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## For Sale Cheap!

A HORIZONTAL STEAM ENGINE OF 4 Horse Power, Fine Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,  
Federal Building, cor. Battery and Washington Sts.  
Route, No. 28.

## DEETKEN'S

Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$30 PER TON. ALL THE GOLD EXTRACTED BY CHEMICAL process. Yield of Sulphurets from 20 to 60 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov8-2m

## SQUARZA'S PUNCH.

## HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff St., near Sacramento.  
Branch at 406 Montgomery street. my 30

## JULIUS SILVERSMITH,

Commissioner for Nevada Territory,

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets.  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

## JAMES PHILAN,

(LATE J. & M. PHILAN.)

IMPORTER AND JOBBER,

Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-1863

## THEODOR KALLENBERG,

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Engraving, Stamping, Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market, (at 7.3m) San Francisco.

## PALMER, HANSCOMB &amp; CO.,

GOLDEN STATE FOUNDRY

AND MACHINE WORKS.

First Street, near Market, San Francisco.

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications. Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast.  
San Francisco, November 29, 1862. 3m

## 50 lbs. MARINE AND

Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Bottoms of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chauldiers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil; if a lighter color is wanted, mix less paint, more lead.  
ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUE, Superintendent,  
WORKS, North Beach; Office, 318 California st., San Francisco.





A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, MONDAY, FEBRUARY 9, 1863.

NO. 15.

#### ESMERALDA CORRESPONDENCE.

AURORA, JAN. 30TH, 1863.

MR. EDITOR:—Quite a large number of your citizens are taking advantage of the present spell of unusually fine weather, to pay us a flying visit, to examine our mines and see for themselves. The hills are daily thronged with new prospectors, looking for "indications," and every thing in the shape of a quartz bolder, will soon be located and recorded, and then, after the process of incorporation is gone through with, the stock will be pushed into the market or pressed upon particular friends, as "wonderfully rich," or as a "good thing." A similar operation was enacted here last fall, by some parties from your city, but upon a somewhat smaller scale. I then cautioned the citizens of San Francisco not to purchase without first becoming posted in regard to the merits of this kind of mining stock.

#### WRONG IMPRESSIONS CORRECTED.

I find by conversing with several new-comers that they have been misinformed, or rather, that they have an incorrect impression as to the name and location of these mines. Many have the name of the county, the district, and the town in their minds, as different mining districts. For the benefit of the mining public, I will correct this error; Mono, Esmeralda and Aurora are all one and the same place; the only difference being this: Mono is the name of the county which embraces all, or nearly all, of the territory of the State on the east side of the Nevada, commencing at the intersecting point of the south line of El Dorado County with the State line, and thence south east, some two hundred miles; Esmeralda is the name of the Mining District in the county of Mono; Aurora is the county seat or chief town in the county of Mono, and is situated on a small flat at the base of Silver, Middle and Last Chance hills, the flat being formed by the conjunction of the gulches, making a town from these hills.

#### SILVER HILL MINING DISTRICT.

This District is situated about seventy-five miles north-west from Aurora, and near Carson Cañon. I would have your readers understand that "Silver Hill," when spoken of in connection with this place is not the name of a Mining District, but only a hill in Esmeralda District.

#### EXTENT OF ESMERALDA MINING DISTRICT.

The territorial extent of this District is from East to West, from two and a-half to three miles; from North to South about three miles, and embraces the following named hills: Silver, Middle, Last Chance, Monterey, Humboldt, Aurora and St. Mary. The town of Aurora is nearly enclosed by these hills, upon which is located from twenty-five to as high as one hundred and fifty well defined gold and silver bearing quartz lodes, and many of them exceedingly rich.

#### THE MINES RICH.

I have operated in quartz for the last twelve years, in California and Washoe, but this District exceeds any thing else that I ever saw in the number of its well defined and paying quartz lodes. No one here pretends that they

are all Ophirs, Wide Wests, or Antelopes; but every third one will pay from \$40 to \$60 per ton in gold.

#### ENUMERATION OF SOME OF THE PRINCIPAL LEADS.

I will here mention the names of a few good lodes that are owned and worked by practical miners, viz.: The Mason, on the summit of Silver Hill, between Central and Old Winnemucca, formerly known as the Eclipse, containing 400 feet in length and six in thickness with every indication of a rich lode, when more thoroughly prospected; the Lady Mack is another good lode and well defined, the length of the claim being about 800 feet, but, like many others, it requires more labor to demonstrate its true value than has yet been expended upon it. The Utah and the Iowa are A, No. 1 lodes, (Antelope not excepted;) both being free from any entangled allegiance to any neighboring lode or spurs. The Dane lode is situated just half way between the two next above mentioned, and is one of the old locations, and from all appearances looks more promising than the Utah did a year ago. This lode is four feet thick, decomposed, and shows free gold. The Yreka, and many others on this hill will surely, before long, prove all if not more than the locators anticipated. The main Esmeralda and Silver Hill are also upon this Hill.

On Middle Hill, are the Pride of Esmeralda, Constantino, Henry Clay, Live Oak, and Lady Howard, all well defined lodes.

On Last Chance hill is the Wyoming, which is one of the best lodes in the district. It was located on the 20th of October, 1860, and is situated between the Banner and the Wide West, and directly on a line with the rich Johnston lode. This company is incorporated and has got everything in good shape through the enterprise of their energetic President and Secretary, Peter Oppenheimer. The Blanchard lode, one hundred feet from the Johnston, in a south-easterly direction, struck excellent rock last week, and the owners anticipate a "big thing." They have eight hundred feet in their claim. The Joe Hooker, is another good lode; one hundred feet in the claim, two and a-half feet in thickness. I may also add the Mammoth No. 1, Gen. Grant and the Ad Valorem, also the Pugh lode, located October 22nd, 1860, by John W. Pugh. This lode is at right angles with the hill and contains six claims of two hundred feet each—they have a shaft to the depth of some forty feet, at which point a rich vein of ore has been found. The well known Wide West is located on this hill, also the Garabaldi, Real del Monte, Alturas, and others.

A word about the extension of the Johnston. The 1st easterly extension of the Johnston has been struck at the depth of fifty feet—the rock is rich; it looks equally as well as the Wide West, and preparations are being made to take out one hundred tons of the rock to be worked. A large yield is looked for by the holders of this truly valuable mine. This extension was located on the same day as the discovery claim—the 3d of July, 1862. Fisher & Crocker and Parker & Co. are the locators. They have eight hundred feet in the claim. The continuation of this lode was found by Peter Johnston, the original discoverer of the Johnston lode, who contracted to sink a shaft on the continuation,

until he found the lode, for 100 feet of the ground. He was so fortunate as to strike good pay-rock at the depth of fifty feet. I shall hereafter continue, from time to time, to keep you posted as regards the merits and demerits of the mines and mining operations in this district, &c. S.

#### A New Mining Region.

A new and probably important mining region has been discovered in the western portion of Nebraska Territory. The discovery was made in September last by a party of some twenty miners, who were returning from the Bitter Root Valley Diggings, to Salt Lake. They collected about \$50,000 in a few weeks, which they took to Salt Lake. This newly discovered mining district commences on Wind river, about 400 miles North-west from Fort Laramie, and embraces an area of about 200 miles in length by 100 in breadth. The deposits discovered up to the present time are of gulch gold, very similar in appearance and richness to those of the Feather river mines. It will assay at least \$18 to the ounce.

The region is the same as that described by Lieut. Reynolds, of the United States Topographical Engineers, in his report of 1859, in which he states that he discovered gold in all the streams embraced within a distance of some 200 miles. It lies at the eastern base of the Rocky Mountains, and is similar in its geological formation to the Salmon river and Bitter Root Valley districts, where rich deposits of gold have been discovered within the past year. The miners who discovered these new diggings unite in the opinion that they will prove fully equal to any ever discovered on the continent. The distance from Omaha to the Wind River Mountains, at the base of which the first discoveries were made, is about 900 miles. The route is all the way upon the north side of the Platte River, and no stream of any magnitude intervenes except the Loup Fork, which can readily be crossed any time during the spring and summer, by ferry.

Freight can be taken to the newly discovered mining region from Omaha at 16 cents a pound. The South Pass of the Rocky Mountains is only about 200 miles from the mines. The facts given above are obtained from sources entirely reliable.

THE OCEAN STEAMERS.—M. O. Roberts advertises the following vessels as belonging to his opposition line of steamers from New York to San Francisco: Illinois, 3,000 tons; Empire City, 2,000 tons; Moses Taylor, 1,500 tons; America, 2,000 tons; and the new steamship Bonaparte, 3,000 tons. The Moses Taylor sails on Wednesday, March 11th.

THE P. M. S. LINE.—The Pacific Mail Steamship Company advertise the Constitution to sail on the 11th instant, and the St. Louis on the 21st. The Sonora sailed on the 31st ult. All the above, on both lines, are well built and substantial sea going steamers.

PRECIOUS METALS.—Thomson's Bank Note Reporter, New York, says there is more gold in the United States now by \$30,000,000 than there was before the war broke out.



## THE GRASS VALLEY, NEVADA CO. SILVER MINES.

The Grass Valley *National* speaks as follows of the silver mines opened near that town, last summer:—

Since the commencement of the season of storms, generally so disastrous to the mining interest, the mines out at Greenhorn have, to a great extent temporarily abandoned operations. But there has not been a total abandonment even during the time of storms, and considerable has been accomplished during the past few months in demonstrating the richness of the diggings at Greenhorn; and the prospect of heavy expenditures of money in opening gold and silver ledges, during the approaching spring, and a confirmation of the opinion now obtaining, of the great wealth of this region, are confidently anticipated by the people hereabout. In the Greenhorn Company, opened last fall, work is progressing satisfactorily. It will be remembered doubtless that a gold-bearing quartz vein was opened last fall, the work being done in an open cut, and that the vein was traced but a few feet, yielding therefrom about \$4,000. A drain was dug from this cut, in the construction of which about ninety tons of quartz were taken out, all of which was crushed, making a handsome yield. A tunnel was subsequently run in to reach the main ledge, striking the vein at a distance of about sixty feet from the mouth of the tunnel, where the rock has a rich appearance. In the Stone wall Jackson claims, adjoining the Greenhorn, work is being done, the prospects of success being highly flattering. Some work has also been done in the Buffalo, Harrison, Jackson, and other silver ledges in the Greenhorn district, and when spring approaches, and fears of inclement weather are no longer entertained, we may confidently look for prosperous mining activity out at Greenhorn.

**NATIONAL PROGRESS IN TURKEY.**—The Ottomans are fast becoming aroused to the importance of intellectual and material advancement. Of late years they have been sending out agents from their most experienced and intelligent men, to visit other countries and become acquainted with their methods and means of progress. That hitherto declining race is evidently profiting by their observations. Evidences of this are constantly accumulating; among the chief of which may be noted the fact that an International Exhibition of the products of the soil, and mechanical industry of that country is to be inaugurated at Constantinople, on the 20th of the present month, to continue for three months. Foreigners are invited to take part in the exhibition and compete for prizes. It seems that the shaking up of that old dynasty by its late encounter with Russia has galvanized real life into it. The "sick man" of Europe may now be considered convalescent.

**INCREASE OF WEALTH.**—The increase of the national wealth for the last decade is set down in the census in round numbers at \$900,000,000, of which about one-third was in States now in rebellion. The remaining \$600,000,000 consisted largely in the augmented value of real property, chiefly in the Western States. A tract of land in the distant uninhabited wilderness was of little value; but when by means of railroads and steam communications, an enterprising and industrious population were introduced, property advanced rapidly in value. The increase of Bank Capital during the decade was less than \$200,000,000, and of deposits in Banks \$125,000,000.

**GEN. SHIELDS.**—The military standing of this gentleman having recently passed under a cloud, he has wisely determined to resign his position in the army and again take personal charge of his rich mines in Mexico.

There is another California General, we wot of, similarly situated, who would probably be of quite as much service to himself and country by following the example of General S. Mining, when one has a rich claim to operate upon, is far better to "put money in your purse" than fighting.

**THE CATTLE MANIA.**—Five or six years ago nearly every one in California was crazy with the cattle speculation. It was said to be impossible to overdo the business, and people could not well wait for the natural increase of stock, but cattle were driven across the plains by thousands. The number in the State was then estimated at about one million and their value at \$30,000,000. About the same number still remain, but their aggregate value has dwindled down to probably less than \$10,000,000. Several thousand head of cattle have been sold the past season, in Santa Barbara county, for from one dollar and a half to three dollars per head.

**COTTON** is now worth from 58 to 60 cents per lb. Two years ago it was dull at 13 to 14 cts.

## Another Gigantic Project.

The present is most emphatically an "Era of Magnificent Enterprises." The inter-oceanic telegraph; the American Continental Railroad; the tunneling of the Alps and the Pyrenees, and the Suez Canal, would, either one of them, 20 years ago, have been considered as a characteristic work of the age. Now either one is so lost in the multiplicity of projects, as scarcely to attract any special consideration; and the gigantic undertaking recently set on foot in Germany, scarcely second to either of the above, is announced in a simple newspaper item, as among the trifles of the day. This last project is no less than a ship canal from Amsterdam, through North Holland, toward the Sea—to be 250 feet wide, 24 deep, and 13 miles long. When completed, it will shorten the distance from Amsterdam to London and all the ports south of the Texel, by about 80 miles, so that vessels will then be enabled to reach the sea in a few hours, whereas the present trip occupies several days, and sometimes weeks. In order to form a safe sea entrance to the canal it will be necessary to construct an artificial harbor, the piers of which will extend more than a mile into the sea. This will be the chief engineering difficulty to be overcome. The total capital required is estimated at \$7,500,000, upon which the Dutch Government guarantee an interest of 4½ per cent. The undertakers are J. G. Jager, of Amsterdam, and the English Engineers, B. W. Croker and Chs. Burn. These gentlemen have been ten years maturing this project, the grant having been originally asked in 1852.

**"THE PHYSICAL MEN OF OHIO."**—The Commissioner of Statistics of the State of Ohio, in his annual report, says: Professor Henry and myself have been several years engaged in defining the American man, by accurate measurements. He presents only such of these as go to describe accurately the men of Ohio. For this purpose he gives the measurements of three hundred farmers, miners, and laborers, in eleven villages; of two hundred and thirty others, in eleven villages; and five companies of Kenney's cavalry—all native Americans. The following appears to be the general results of these measurements: That the man of Ohio is five feet nine and one-third inches high, and is taller than any European nation of which there are measurements. He is taller than the Belgian, by several inches; than the English, and even the Scotch Highlanders. The Highlanders, however, exceed the Americans around the chest, and are, on the whole, the stoutest. In complexion, eyes, and hair, the light predominates over the dark. The prevailing hair is brown, and the prevailing eyes gray or blue. In one word, the native American is a modified German of the time of Tacitus, and such he ought to be from his antecedents.

**SELLING CHILDREN IN CHINA.**—The *Esperance*, of Nancy, publishes the following particulars respecting the proceedings of the Sainte Enfrance, in China, extracted from a letter written by a lady, a native of Nancy, at present residing in Hong Kong:—

All that you have heard about Chinese children is but too true. They are not, indeed, given to pigs here, but that is the case further in the interior. At Hong Kong mothers come to the asylum of the Sainte Enfrance and offer their children for sale, as I myself saw only a day or two ago. I have just visited this asylum, kept by the nuns of St. Paul, whose principal establishment is at Chartres. While I was there the bell rang, a nun went to open it, and returned in an instant after with a female infant only a few days old. The price paid was 200 sapeks; but the mother, a hideous creature, wanted more, or else to have the child's clothes returned, which were accordingly given to her. The nuns told me that there were women who carried on quite a trade in these poor babes. One had brought no less than forty to the asylum, and she confessed that before she had the opportunity of selling them, she had thrown above six hundred into the sea. I must tell you that I stood godmother to the poor thing purchased in my presence. The great cause of these horrors is that the Chinese can repudiate their wives and marry again every year. The divorced wives, according to the Chinese laws, have the right of life and death over their children, and if unable or unwilling to rear them they get rid of them in any way they choose.

**THE STATE ALMANAC AND HAND-BOOK OF STATISTICS.**—We have received of Henry G. Langley, of Directory fame, a neat Hand-Book Almanac, containing various items of interest of both State and Country. Long may the Publisher live to direct the footsteps of our citizens.

**COINAGE.**—The amount of gold coined at the San Francisco Mint, for 1862, was \$33,042,841—of silver \$1,205,698.

**MUNIFICENT DONATION.**—We see it stated in the daily papers that Harvey S. Brown, Esq., has donated to the City College, now a flourishing institution of 125 pupils, the princely sum of \$50,000 in cash and twenty acres of ground, on what is known as "University Mound," on his Bernal Heights property, some five miles out of the city, on the San Jose road. This gift is none the less genuine, or positive, by reason of its being coupled with certain conditions of land sales, because those sales are such as the natural and inevitable growth of the city, in that direction, must bring about in a very short time. The donation is effective so soon as Mr. Brown shall have disposed of five hundred lots in the aforesaid tract, at \$200 each. The proceeds of one half of each lot are to go directly into the hands of the Trustees, as a fund, until the required number of lots are sold and the \$50,000 accumulated. Henry H. Haight, Thomas H. Selby, James D. Thornton, Dr. H. P. Coon, H. M. Newhall, F. Henderson, and other prominent citizens, have each already secured a number of these lots, which are beautiful in point of location, and toward which the city is rapidly extending. The streets on this tract are already laid out, and are named after the principal colleges of the East, viz: Yale, Harvard, Dartmouth, Princeton, etc., while the cross streets are called after the most eminent college professors, such as Alexander, Mofft, etc. When located on University Mound, which it doubtless soon will be, it will be known as the University College.

**THE HESPERIAN** for February is at hand, and is an unusually interesting number. Besides the usual patterns and pattern outlines, it also contains the representations of two of California's flora—the "Tiny Petunia," and the "Purple Wedge-spotted Evening Primrose." The descriptions are by Dr. A. Kellogg, who has done much, through the columns of the *Hesperian*, to spread before the world some of the beautiful and rare floral productions of our golden State. It is true, as the Doctor beautifully remarks "We owe the world something in return for the spread of their own local knowledge—oft-times of increasing interest as it reverberates upon a distant shore. The commonest objects to us, are new somewhere; the most trifling incidents from our heart's love, are the fragrant flowers along our path."

"The Rising of Springs and Streams, in California, before the Winter Rains," by Dr. Henry Gibbons, is a very interesting and valuable paper, which we intend to transfer to our columns. "The Golden Wedding" is another interesting paper, and will carry many a heart in California, back to the "Old Folks at Home," as the unbidden tear moistens the eyes which read the account of this "golden wedding" in the far off Eastern State of Maine.

**SHOOTING MOLTEN IRON.**—This process consists of a hollow shot of any given caliber, with a round hole or fuse in its side; on the sides of this fuse are two parallel raised lines, grooved on the inner under sides of them, into which to slide a piece of wrought iron to clean the fuse when the shell is filled. The inside of the shell must be coated with some substance, to prevent the molten iron from coming into contact with the iron of the shell. The shell can be fitted to any sized gun; when filled with molten iron it has the weight and form of a cold ball; when it strikes a solid body it will burst and the molten iron is a thousand times more destructive than a hot shot.

**TERRITORIAL ENTERPRISE.**—We are under many obligations to the Territorial *Enterprise*, published at Virginia City, N. T., for its daily supply of mining intelligence, from that important locality. The *Enterprise* is evidently a live institution, and will, we trust, long continue to occupy the foremost position among the journals on the Eastern Slope. We now and then miss receiving a number, which would be very annoying, were it not that we can always find access to its files at the Agency room of Mr. Thomas Boyce, corner of Sacramento and Montgomery, St. Mr. B. is the San Francisco Agent for this paper, and receives subscriptions and advertisements for the same.

The news from the Colorado mines is very encouraging. \$100 per foot has been offered in Los Angeles for 50 ft. in the Los Angeles Lode, (Colorado Dis.) Fifty feet sold in this city, on the 29th ult. for \$250.



# MINING AND SCIENTIFIC PRESS.

## SAN FRANCISCO MINING NOTICES.

### ASSESSMENTS LEVIED.

Assessments upon Mining Stock have been levied as follows:—

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Carey Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Airatic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norcross.—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skar, at the Mine, on or before Feb. 25.

Sierra S. M. Co.—An Assessment of \$21½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount David on Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

### ASSESSMENT SALES OF MINING STOCK.

Sales of Stock for non payment of assessments are advertised to be sold as follows:—

Cole Silver Mining Co.—Sales by Jerome Rice & Co., 327, Montgomery St., San Francisco, on the 25th of February.

Combination G. & S. Mining Co.—Sale by E. S. Spear & Co., at 433 California St., on the 10th day of March next.

Norman S. M. Co.—Sale by John Middleton & Son, 40 Montgomery Block, on Feb. 16.

### COMPANY MEETINGS.

The Lewis G. & S. Mining Co.—Annual Meeting will be held at 622 Merchant St., Feb. 12, for election of officers.

Ida G. & S. Mining Co.—A Meeting of Stockholders will be held at 522 Montgomery St., San Francisco, February 17th.

Burning Moscow.—Shares of this Company, in arrears for assessments will be sold at auction, Feb. 9.

Baltimore America Consolidated.—An assessment of 50 cents per share was levied, Jan. 5.

Savage.—An assessment of \$35 cents per share was levied, Jan. 7.

Hawley.—An assessment of 25 cts. per share was levied Jan. 5, payable in 30 days.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

Henry Martin G. & S. M. Co.—"Thomas Wallace, Trustee," gives notice that whereas certain parties illegally claiming to be Trustees of this Company, have changed the name of the Corporation to the North Star G. & S. M. Co., and illegally elected officers for the same, the public are cautioned against such acts, etc.

RED, WHITE AND BLUE G. & S. M. Co. levied an assessment of 25 cts per share, payable on or before Feb. 1st, office cor. Pine and Montgomery Sts.

Live Oak Copper Co.—The Annual Meeting of Stockholders for election of Trustees, will be held at Office, in Montgomery Block, Feb. 2, 1863.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

Mina Prieta S. M. Co.—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

Franco-Americano S. M. Co.—The following persons were elected officers at the meeting of trustees, Dec. 26th—Chas. F. Galan, *President* and A. S. Gould, *Secretary*. The office of this Company has been removed to No. 528, Clay street, Room No. 2.

Central Silver Mining Co.—The Annual Meeting for the election of Trustees will be held Jan. 13, at Office, No. 712, Montgomery street.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

Desert Mining Co.—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

Keystone Copper Mining Co. advertise for proposals to purchase or treat 3d quality copper ore. Proposals received till Jan. 16th.

Hale & Norcross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

## WASHOE MINING NOTICES.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and C St., Virginia City.

Norman S. M. Co.—Middleton & Sons, No. 40, Montgomery Block, will sell delinquent stock of this Company, February 16th.

Baltic Mining Co.—Notice is given of an adjourned sale of shares in this Company, to take place on the ground, Jan. 31st.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—J. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Eldorado G. & S. M. Co.—An assessment of one dollar per share was levied, Dec. 31, 1862, payable, Jan. 22, 1863, to the Secretary, at corner of Montgomery and California streets, or to the Superintendent at Virginia City.

Texas Co.—Tennessee Ledge.—An assessment of 25 cts per foot was levied, Dec. 22, payable on or before Jan. 21 1863.

The North American Co., Gold Hill, will sell at auction Jan. 31, stock of shareholders delinquent in payment of assessments.

MARTIN WHITE MINING COMPANY.—An assessment of ten cents per foot has been levied, payable to the Secretary, at office on C Street, Virginia City.

THE SWEENEY Co., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Beach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground..

## ESMERALDA MINING NOTICES.

THE ZENOBIA LODGE COMPANY, give notice that they claim a superior title to the Johnson Co., claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder.

ORE TESTS.—Several inquiries have been made to us of the different chemical tests that will discover traces of silver and copper in the rock. If our friends who are conversant with this matter will forward, information respecting such chemical tests to us, we will be happy to give them publicity. [Amador Ledger.]

Persons interested in the above will find the desired information, and much more in the same connection, all valuable to copper and silver prospectors, in late numbers of this paper. A remittance of six months or a years subscription to the MINING AND SCIENTIFIC PRESS, will afford them all the valuable information obtainable from books in relation to prospecting for either silver or copper, and assaying and testing ores of the same. The dissemination of that class of information is the speciality to which this paper is devoted, and no mineral prospector in the silver and copper regions of California can invest \$4 to better advantage than by sending the same to this office and becoming a subscriber and reader of the Press. We shall be extremely happy to receive the names of all who may favor us with cash patronage. We also pledge ourselves at the expiration of the year to refund to any party double the amount of his subscription, who may honestly think he has not got the worth of his money in valuable information from our columns.

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the Press, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and *four dollars, or two dollars* for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so for meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the Press for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

AN IMPERIAL CITY.—The annual expenditures of New York City are \$20,000,000.

SILVER IN NOVA SCOTIA.—A letter from Nova Scotia states that, in prospecting for gold in the northern and eastern portions of the province, the writer found silver, as well as gold, in great abundance; that in every panful of earth washed from the stream he found pure metal: and veins of spar containing native silver traverse the mountains on each side of the river, and are exposed at some points along the sea-shore.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of every thing generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This Journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 86 Names can be sent in at different times and from different Post-offices Specimen copies will be sent gratis to any part of the country.

### EWING & SMITH, Publishers,

Room 24, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



## Mining and Scientific Press.

W. B. EWER. . . . . EDITOR.

MONDAY EVENING.....FEBRUARY 9, 1863.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal. at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, Proprietors.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING. Designs of every description—Buildings, skeletons of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates.

PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## NOT SO VERY STRANGE.

Much astonishment has been expressed of late, that the immense deposits of copper ore now so rapidly being developed in nearly every mining section of the State should have remained undiscovered until the present time. It is also a puzzle, "strange at least," in the estimation of one of our mountain contemporaries that "during an excitement of gold discoveries" "we seldom hear of any deposit or vein being found which does not contain gold; while a similar order of things may be noticed during silver, copper, or other excitement's."

These things are not so very strange, after all, when we come to reflect upon the lack, among our miners, of that particular class of information so essential to the correct understanding of their calling. Who that has spent any time in the mines, especially during the period prior to the Washoe excitement has not noticed, as a fact, most prominently developed, that miners of those days esteemed a knowledge of mineralogy and geology as of very little account, "especially in California," where, they said, "all pre-established rules of mineralogical science are found at fault." The practical miners of California, of the last decade, almost universally regarded with smiles of derision, the nice discriminations and distinctions of the mineralogist. They were looked upon as airy nothings, fit only for cabinet studies, and entirely without practical value in the mining field.

We would not be understood as underrating the general intelligence of California miners; for a residence of more than twelve years among them, a large portion of the time a sharer of their toils and privations, has fully taught us the fact that the world cannot produce their equal, as a class, in that respect.

So far as mining for gold is concerned, it is true there is comparatively little need of the particular information of which we are speaking; for gold working is the simplest of all mining operations ever undertaken. But recent developments have fully established the fact, which is now coming to be universally acknowledged, that every operative miner, in whatever field, should be thoroughly acquainted with the nature of the substances upon which he is daily working, or which may, fortuitously, come in his way. Such knowledge should not be confined exclusively to the overseer, or superintendent.

A very slight knowledge of mineralogy would have taught the original owners of the Comstock ledge, to have carefully examined, "the troublesome black stuff," as they termed it, which was all the time in their way while they were searching for gold in the richest silver lead now known to the world. So it has been in hundreds of instances, all over the State. Many rich silver leads are now being opened on the Western Slope, which were abandoned years ago, as worthless, because they did not show the color of gold. So it has been with the more recently discovered leads of copper, in various portions of the State.

Our mountain contemporary, already alluded to, thinks it

"strange at least," that the excitements should run in such direct lines—that is; that the discoveries of one period should be all gold, and another all silver, and another still all copper, etc. Not at all, and from the very reason already named.

After the Washoe excitement had proved a reality, "specimens" from that locality were sent into every section of the State, and miners began to run hither and yonder, in search of old abandoned claims, which they recollected had presented similar "indications" to those of the Washoe specimens. Editors throughout the State also rummaged over their old books, and printed long essays on silver mining, silver ore tests, etc. Of course the discoveries then made were chiefly silver. What did the miners know about copper? Bye and bye, somebody who had paid a little attention to mineralogy, casually stumbled upon some copper ore—knew its value, and commenced developing it. It proved valuable. Capitalists and Scientific men went out to the mines, examined them thoroughly, were satisfied of their value and backed up their knowledge by the ready cash, paid in hand to the miner for his copper ore. A new idea is evolved—new at least to the California miner—"copper specimens" begin to travel around. Another search is made for "old diggings;" "indications" are compared; the newspapers publish descriptions of the different kinds of copper ore, with directions for tests, assays, etc., and lo! a copper excitement comes up. Nothing strange, is it, that all the discoveries "about these days," should be of copper?

Our miners are gradually learning the lessons, the utility of which they smiled derisively upon a few years since. Bye and bye, they will become very good mineralogists and geologists. But they are learning these lessons very slowly, and hundreds among them are losing fortunes, by waiting for the knowledge to come to them, when they should go after the knowledge. It should be recollected that there are many other lessons yet to learn. Gold, silver and copper constitute but a portion, and we fully believe, even when taken collectively, but the smaller portion of the mineral wealth of California.

Let our readers may think that we esteem the mineral knowledge of Californians below the average standard of other countries, we will relieve them of any such impression by the following extract, illustrative of the mineral knowledge, up to a very late period, in a country where mining is now carried on to an extent and with a scientific knowledge nowhere else observed. The extract was written for the "CALIFORNIA MINING JOURNAL," published by us three or four years since:—

Some of the mining districts of Great Britain are utterly destitute of mineralogical education, and it is common to find some of the most intelligent miners only acquainted with one or two substances, which are brought prominently before them in the routine of their employment.

It is a fact that for some years lime was exported to New South Wales, where it existed in abundance in its natural state, and it is notorious that the discovery of gold in Australia was not made till after it was found in this country.

Cornwall, although it has been celebrated for its tin mines from the earliest periods of history, yet, until the last century the ores of copper were used to repair the roads, and whenever copper appeared in a vein, it was a common expression that "the ore came in and spoilt the vein," [just as the "black stuff" did in the Comstock lead, we suppose. Ed. Press.] Even when the yellow ore or copper pyrites had been long appreciated, the sulphide of copper was thrown away, and the rich black ore, or oxide of copper, was washed into the rivers.

In Derbyshire and Cumberland, although it is indisputable that lead has been smelted from the common blue ore, (sulphuret of lead) ever since the government of the Romans, yet the other ores of the same metal (white carbonates of lead, &c.) were never thought of, but left in heaps as rubbish—the public roads which had in some instances been repaired with these rejected ores, have been taken up and smelted to good account. The ores of zinc, both sulphurets and carbonate, were likewise thrown away in many of the mining districts of England until within the last few years. Blend has been mistaken for lead ore, and a blast hearth erected to reduce it, and in another case from its resemblance to a certain iron ore, a considerable quantity was bought and conveyed to one of the largest iron works in South Wales. The collection of a series of iron ores from the great London Exhibition of 1851 led to the important discovery that the road into Northampton had been cut through rich iron ore, which in some places had a thickness of twelve feet. Then they were ignorant of its value, but now it is being sent in immense quantities to supply the Staffordshire iron works.

So much having been overlooked in a country densely pop-

ulated like Great Britain whose mines now yield on an average about £30,000,000 per annum, it is reasonable to conclude that important discoveries will yet be made in this State.

The last paragraph is most emphatically prophetic, and fully demonstrative of the certainty with which accurate science leads to definite results. We may here mention that the writer of the above extract, was the same gentleman who first assayed the Comstock silver ore and introduced to our people a mineral region to which California, with all her acknowledged mineral wealth, is but the stepping stone, in comparison.

NAUTICAL MAGAZINE.—We have received the February number of this valuable publication. It is, as usual, replete with new and valuable matter appropriate to a magazine devoted to nautical science in general and the commercial interest of the Pacific Coast in particular. This publication is highly creditable to the important interest which it represents, and we know of no other man, between the two oceans, who is so well calculated to conduct such a work as CAPT. BELL—he is emphatically "the right man in the right place," and we trust he may long be spared to fill it.

Capt Bell is a man, who, from his youth up, has been ardently and earnestly devoted to the great and good work of elevating to their proper standard the character and profession of the sailor, and it is a matter of sincere congratulation that the commercial interest of this city has joined hands with him so earnestly in the work. As an important means for the accomplishment of the desired end, a large number of the leading ship-owners, merchants, shipmasters, and marine underwriters of this city have joined with Capt. Bell, in a memorial to the Legislature asking for the establishment of a Board of Nautical Education and a Marine School Ship for this harbor. The importance of such a project in an isolated commercial emporium whose rapid prospective growth is so manifest as that of San Francisco, can scarcely be estimated; and our Senators and Representatives, now assembled, will greatly neglect the interest of their constituents in this city, and indirectly of the entire State, if they fail to take the initiatory steps toward granting the memorial above alluded to.

A VALUABLE TRACT OF COUNTRY.—The value of the oil thus far obtained from the Venango, Pa. oil region is estimated at \$4,000,000, yet the producing territory is but some eight miles long, with an average width of less than forty rods. There appears to be no present prospect of diminution in the yield.

NORTH PACIFIC REVIEW.—We have received the February number of this excellent periodical. It is illustrated with a well executed and life-like portrait of Brig. Gen. Wright, the Federal Commander of this District. Its literary treasures are bright and sparkling and fully up to the standard of first class magazine literature.

## NEVADA COUNTY STOCK REPORT.

(COMPILED FROM THE NEVADA DEMOCRAT)

Under date of January 31st, the Report of the Democrat says: "The activity in copper speculations, heretofore noted, still continues, and quite a number of sales have been effected, mostly on private terms. Two shares in the Seals Copper Mine were sold yesterday for \$100 each—being at the rate of one dollar per foot. The claims of this Company are located on the main lead, near the Zinc House. A number of organized companies are engaged in opening their leads and testing their ore. Specimens of ore from Baldwin's lead, near McCarty's Ranch, assay very rich—in one instance as high as 30 per cent. The company owning this lead is known as the "Consolidated" Company.

Prospecting for copper is still being carried on vigorously. A sale of 20 feet in the Well Lead was effected on the 28th ult, at the rate of \$20 per foot, and 100 feet in the Champion Company's Lead changed hands at fifty cents per foot.

The following are the bidding and asking rates for the week ending Thursday Evening, February 5, 1863:

## GOLD QUARTZ MINING COMPANIES.

	BID.	ASKED
Seath & Clay, (per 100 feet).....	\$25,000	50,000
Weeks & Co. ....	—	—
Nevada Quartz Mining Co. (1/4 interest).....	12,000	—
Mattigny Company.....	300	—
Brickyard Company.....	50	100

## COPPER COMPANIES.

Tallman & Co.—Well Lead (100 feet).....	2,000	—
Consolidated .....	300	—
Hagadorf .....	100	—
Birdseye Gold, Silver and Copper Mining Company.....	200	—
Nevada G. S. & C. M. Co. (10 feet).....	50	—
Champion (100 feet).....	50	—



**INDICATIONS.**—Rich specimens of float rock were brought into Virginia City, Jan. 27, which were said to contain considerable silver. They were said to have been found on the road leading from Virginia to the Reese River Mines, and some thirty or forty miles this side of the latter place. Quartz of this character is said to be quite abundant in that locality but no ledge has yet been discovered.

## GENERAL MINING STOCK REPORT.

### REPORT OF SALES

At the San Francisco Mining Stock Board,  
For the week ending February 7, 1863.

Names of Companies.	Total No. Shares.	Shares per R.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Ophir	16,800	12	\$300	34.5	24.50	24.50	24.50	1.600	2,600
Gould & Curry	4,800	4	600	31.50	—	—	—	—	3,225
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	5,000	4	400	450	575	575	550	6.0	550
Potosi	7,800	2	400	11.5	11.5	125	11.5	—	—
Hale & Norcross	8.0	2	600	510	510	—	500	—	—
Sierra Nevada	3,000	1	300	60	60	61	65	61	—
Dancy	8,000	4	500	—	—	—	—	—	—
Burning Moscow	4,800	2	100	65	65	69	66	65	65
North Potosi	2,000	1	300	25	29	30	27½	25	29
Rogers, F. D.	3,000	1	250	—	—	—	—	—	—
Marcondi	7,000	2	125	32	32	25	—	25	—
Charles Caney	1,800	1	30	22½	26	47½	40	48	49
Sacramento	1,800	1	500	45	—	35	40	42½	42½
Lacarne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	—	—	1175	1200	1.00	1300
Towa	—	—	—	—	—	—	—	—	—
El Dorado	—	—	—	45	—	—	—	—	—
Norton	—	—	—	20	18	22½	26	25	25
Central Hill Tunnel	1,600	1	—	—	—	—	3	—	—
Mount Davidson	10,000	3	200	—	44½	4½	—	—	—
Wide West	2,600	4	60	330	350	335	355	360	360
Antelope	1,200	1	500	205	215	215	235	245	250
Esmeralda	1,000	1	1000	—	51	—	50	50	50½
Real del Monte	4,400	1	400	26	27½	28½	28½	31	30
Utah	1,200	1	100	5	5½	—	140	—	100
Silver Hill	3,000	1	—	26	34	32	27½	28	28

### Coso Stocks.

The Josephine changed hands at the Stock Board, on Monday, and Tuesday at \$15, on Thursday at \$15½ and on Saturday at \$16. Willow Springs—is not quoted this week. It is held at \$40.

### Mexican Mines.

Mina Prieta—No sales is held at \$145 @ 150.  
Dios Padre was quoted on Tuesday at \$40, on Wednesday at 39 and on Friday at 37½.

SAN FRANCISCO, February 9th, 1863.

### STOCK REMARKS.

The business of the past week has been mostly confined to second and third class Stocks. Ophir and Gould & Curry have been but little dealt in. These stocks seem to have been pretty much withdrawn from the market. The amount of business for the week has been large, and at prices very considerably in advance of previous rates.

Ophir has been in steady demand, and at about last week's prices, but with a limited supply. Bids, on Friday and Saturday had materially improved. A dividend of \$48 per foot was declared on Friday; payable to-day. This dividend exceeds the expectations of stockholders.

Gould & Curry has also been very quiet during the week—very little stock offering. Prices at about last week's quotations.

Savage is still a favorite, having advanced about \$300 during the week. But little stock is offering although it is earnestly enquired for. Holders are generally confident that this mine will soon prove itself equal to the best in Virginia.

Chollar is still improving, having advanced fully \$200 since last week. The long withheld decision in its suit with the Potosi, seems to be operating in its favor. While its friends are firm in the belief of a still further advance, others look as confidently for a speedy decline. The result of the lawsuit is still anxiously awaited, and the "laws delay" most severely complained of by some.

The Potosi declines at about the same ratio with the advance of the Chollar. A few simple words from the seat of justice may, at any moment reverse the order of procession.

Charles Caney.—The Stock of this Company has taken a most remarkable upward tendency during the past week, and now, stands at one hundred per cent. in advance of its figures one week since. We are not advised of the cause of this advance unless it be a change in the management at the mine, which we believe has been effected within a short time.

Sierra Nevada has been somewhat fluctuating, advancing from \$60 to \$70 and again receding to \$62.

Wide West has been extensively dealt in at advanced rates. Antelope has advanced \$40—closing at \$50, with a scarcity of stock in the market.

Utah opened at a figure greatly in advance of previous quotations, but did not sustain itself, closing at prices but little in advance of the close of the previous week.

Real del Monte has advanced during the week from \$25 to \$30, with good demand for its stock.

### ESMERALDA STOCKS.

There has been considerable activity manifested in Esmeralda Stocks during the week and generally at prices very materially in advance of previous quotations.

### TRANSACTIONS IN SHARES.

#### NEVADA TERRITORY.

Burning Moscow—20 at \$93; 13 at 65; 43 at 70; 50 at 65; 38 at 67; 20 at 70; 19 at 69.  
Chollar—40 at \$500; 20 at 525; 20 at 560; 30 at 575; 20 at 560; 40 at 575; 4 at 575; 12 at 610; 20 at 575; 40 at 610; 20 at 630, buyer 30 days. (\$950 forfeit.)  
Cedar Hill Tunnel—10 at \$5; 5 at 3.  
Charles Caney—20 at \$22; 20 at 25; 12 at 25; 20 at 30; 40 at 40; 75 at 47½; 10 at 50; 10 at 52; 23 at 35; 20 at 40; 25 at 45; 13 at 47; 10 at 48; 4 at 50; 20 at 50; 20 at 50.  
Dancy—20 at \$225; 25 at 235.  
Governor Nye—10 at \$7; 25 at 8.  
Great Western—10 at \$3.  
Gould and Curry—4 at \$3,200; 60 at 3,200; 12 at 3,250.  
Hazel Green—10 at \$3; 40 at 2½; 30 at 2½.  
Meredith—35 at \$35.  
Mount Davidson—8 at \$5.  
Ophir—48 at \$2 42½; 60 at 2,450; 12 at 2,425; 43 at 2,425.  
Potosi—10 at \$150; 12 at 145; 20 at 150; 40 at 125, seller 30 days.  
Potosi—North—10 at \$20; 40 at from \$25 @ \$35; 10 at 30; 50 at 30; 50 at 30½; 25 at 30; 10 at 30; 50 at 30.  
Savage—10 at \$1,500, buyer 90 days; 10 at 1,450; buyer 60 days.  
Sierra Nevada—10 at \$60; 25 at 65; 26 at 70; 18 at 75; 10 at 62.  
Sacramento—10 at \$40; 5 at 42½; 10 at 45; 25 at 45; 5 at 40.  
Union Tunnel and Mining Company—10 to 16.

#### ESMERALDA DISTRICT.

Antelope—10 at \$210; 5 at 215; 5 at 245; 28 at 235; 80 at 240 @ 250.  
Esmeralda—20 at \$52, 10 at 50; 100 at 50; 100 at 50; 10 at 48; 20 at 50; 11 at 54; 9 at 64; 15 at 50; 10 at 50½; 40 at 50.  
Real del Monte—25 at 31; 11 at 29; 526 at from 28 @ 33.  
Silver Hill—50 at \$26; 20 at 33; 30 at 34; 25 at 34; 10 at 30; 10 at 29; 50 at 32; 11 at 32; 10 at 32.  
Wide West—5 at \$332½; 5 at 332½; 20 at 340, buyer 30 days; 20 at 330; 10 at 330; 10 at 330; 5 at 335; 10 at 340, 30 days.  
Utah—10 at \$112½; 10 at 120; 70 at 140; 50 at 160.  
COSO STOCKS.  
Josephine—5 at \$15; 10 at 16.  
COPPER STOCKS.  
The Napoleon has been considerably dealt in the past week, at a slight advance on last quotations. The following transactions are quoted—15 shares at \$37½; 12 at 39½; 20 at 38½; 3 at 40.

### Stocks in Virginia City.

Corrected by WIGHTMAN & MITCHELL for the Virginia City Union.  
The following stocks, are in the market in Virginia City, and held at the prices annexed:

Ashland	\$ 9 00	American Basin Co.	20 00
La Crosse	25 00	Hawkeye	20 00
Santa Fe	15 00	Consolidated Cedar Hill	4 00
Empire	5 00	Utah	40 00
Santa Rita	35 00	Indian Queen	5 00
McBee	25 00	North American	5 00
Zouave	10 00	Philadelphia	2 00
Belvidere	15 00	Sigol	2 00
York	4 00	Virginia	5 00
Governor Nye	7 00	Commercial	4 00
Baltic	20 00	Clede San	3 00
Peyton	—	Bloomington	6 00
Douglass	—	Gold	20 00
El Dorado	—	Golden Eagle	10 00
Summit	5 00	Pecatur	5 00
Washington Ledge	6 00	Atchison	150 00
Milton	—	Comet (Simpson's Park)	50 00
Cedar Hill Tunnel	5 00	Mohagan	6 00
Hazel Green	5 00	Golden Era	10 00
Surety	25 00	Osceola	10 00
Laboring	11 00	Madison	—
Swezey	—	U. S. Tunnel	—
Caledonia	10 00	Sacramento	—
St. George	4 00	Harrison Co., Guler Ledge	4 00
Mary Ann	25 00	Monarch	20 00
Adriatic	2 00	Ivring	15 00
Golden Gate	5 00	Bald Eagle	2 00

### ESMERALDA STOCK REPORT.

At the meeting of the Esmeralda Stock Board, held January 23d 1863, the following business was transacted in stocks, as reported in the Esmeralda Star.

Union Tunnel.—\$20 bid, 12 days, now offering.  
Utah—\$40 bid, cash, none offering.  
East Essex Ex. Urat—100 feet offered at \$10.  
Perce—12 shares offered at \$5.  
X-Eliab and Constantinople consolidated—50 shares sold at \$1½.  
Chihuahua—10 feet offered at \$12½, bid 10.  
Arcado—25 shares offered at \$10, bid 6.  
Pacific—100 feet offered at \$10, bid 5.  
Heath—25 shares offered at \$15, bid 8½.  
Old Winoanucca—30 feet offered at \$5.  
William Tell—65 feet offered at \$2½.  
Ural proper—5 feet offered at \$250, bid 200, half cash, balance 20 days.  
Gen. Jackson—20 shares offered at \$14, bid 13½.  
Fallstaff, Consolidation—40 shares offered at \$5.  
Atlantic—\$2 bid, none offering.  
[Green Backs 40 per cent discount.]

Esmeralda Stocks offered at San Francisco valuation:

Autolope	offered at \$250	Wide West	offered at \$375
Garibaldi	" 27	Math Esmeralda	" 55
Silver Hill	" 29 @ 30	Utah	" 30
Elina	" 5	Real del Monte	" 22

### TRANSACTIONS OF THE WEEK.

12 feet Alturas sold at \$15 per foot.  
25 feet Fresno sold at \$7½.  
10 feet Fresno sold at \$10.  
31 feet Pacific sold at \$4.  
For Report of January 30th, see bottom of next column.

### WASHOE STOCK REMARKS.

[COMPILED FROM THE DAILY TERRITORIAL ENTERPRISE.]

We infer from the "Reports" of the Territorial Enterprise that transactions in mining stocks in Virginia City, during the week of the market represented in our issue of to-day, have manifested an air of unusual prosperity—greater than for any similar period since last summer or fall. Considerable demand has existed, during the week, for outside claims, some of which have heretofore not been inquired for, and were unsaleable at any price. There also appears to be quite a demand for most of the prominent claims in the market, at very important advances. As yet, however, operations are chiefly confined within the means of small capitalists, and, as a consequence, transactions are light. The demand for some claims greatly exceeds the inclination to sell, at present rates. The general disposition on the part of buyers appears to be to purchase claims which have proven good, even with a pending lawsuit, rather than to chance an undeveloped mine. We append the transactions and rates of the week, up to the latest dates received.

#### TUESDAY EVENING, January 27.

Accounts from Palmyra are not so encouraging as to the extent of the mines in that locality, although recent developments indicate the existence of several claims of undoubted richness. The Beach-Paxton Co. are now taking out rock of much better quality than when near the surface. Several unimportant sales have taken place to-day.

#### WEDNESDAY EVENING, January 28th.

Flowery Hill is being talked into some favor. No ledge has yet been discovered, but thirty days, it is claimed, will solve the problem. There has been considerable life in the stock market, to-day—much bantering, much mystery, much quiet excitement, but few positive sales. There has been some inquiry for Hazel Green at current rates, and Sacramento is sought for at 60 @ 65. Wellington is also in demand at our figures of yesterday. With these exceptions, which indicate something of an advance in the stocks named, we have no important changes to note in our last quotations.

#### THURSDAY EVENING, January 29th.

Greater activity is manifested in mining stocks, to-day than has been noticed for several weeks previous. Considerable demand is made for outside claims, some of which have not heretofore had a market value, and were unsaleable at any price. The Dunn Company's stock is in good request at \$4 @ 5 per foot. The claims are said to present a much better quality of rock as depth is attained on the ledge.

Twenty feet of Hazel Green sold at \$3½ per foot. This stock has very much depreciated in the market. The appearance of the claims indicate that a higher figure might be paid with a good show of success for the buyer. Yellow Jacket is in demand at \$100 per foot. There appears to be a greater disposition on the part of buyers to purchase claims which have proven good, with a pending lawsuit, than to chance a mine undeveloped.

Twenty feet of the Union sold, to-day for \$12½. Ten feet of Birdsell sold at 20 dollars per foot. Several other sales were consummated, the terms of which are kept private.

#### FRIDAY EVENING, January 30th.

Ten feet of Sacramento sold at \$55 per foot. North Potosi is enquired for at market rates. Peytona is enquired for. Ten feet of Birdsell sold for 20 dollars per foot. Fifty feet of Wellington sold at private rates. Twenty feet of Sinaloa are reported to have changed hands at \$7 per foot.

#### SATURDAY EVENING, January 31st.

Sacramento is in demand at \$55 per foot; 30 feet changed hands at these rates. Yellow Jacket is inquired for at 110 dollars per foot, and can be sold at these figures in lots to suit the seller. This company are taking a large amount of rock from their mine, which, we are informed, is readily sold at eight dollars per ton at the dump. The Coppers and Mills Company are taking some very rich rock from their claims, resembling the best found in Gold Hill. We are not advised as to the quantity of this kind of ore, but presume it is of great extent, being the Northern extension of the Gold Hill Ledge. Waterhouse is enquired for at 3½ per foot; Gay at 2½. El Dorado is quiet, held at 60 dollars, without sales. Birdsell is held at from 22½ to 25—ten feet changed hands at 20, and finds ready sale at the latter figure. Hazel Green is offered at \$4 per foot, but there is no demand for the stock. Rock was exhibited to-day, taken from the Oriental claims, which had the appearance of being rich in silver. The rock was from a small vein verging to the ledge. The Company expect to strike the main ledge within 20 feet of this point.

La Crosse is offered at \$17 per foot. Wellington is inquired for. Several small sales have taken place in Gold Hill stocks. Claims in this district are in general demand and during the summer will probably command high figures in locations not at all prominent in the market at present.

#### MONDAY, Feb. 2, 1863.

There has been less buying in claims to-day than usual, though not without apparent indication on the part of those desirous to invest. Present holders seem determined on demanding an advance on the current rates, while the would-be-purchasers seem disposed to doubt the propriety of standing the rise.

There has been considerable demand during the past few days for Milton. Fifty feet, we are informed, sold to-day at \$60 per foot.

Several lots of stock are offered for sale to-day from Flowery District. There appears to be no demand for claims in this locality. Operations in these mines have generally proven unsuccessful.

There continues to be some demand for Dunn stock. Several unimportant sales have been effected in stocks in Virginia and Gold Hill Districts.

### ESMERALDA MINING STOCK REPORT FOR JANUARY 30TH.

The above report has come to hand just as we go to press, and we quote bids as follows:—Utah \$100; Chihuahua \$0; Ural \$500; Fallstaff \$4; Heath bid \$10; Newton \$50.

QUOTATIONS OF THE WEEK.—25 feet of Utah \$80; 25 at \$100. 25 feet Perce at \$5; 25 of Strawberry at \$10; 75 Garibaldi, Hartford, Co. at \$5.

### Esmeralda stocks offered at San Francisco Valuation—

Antelope offered at	250	Wide West offered at	370
Garibaldi	27	Utah offered at	75 to 100
Main Esmeralda	55	Elina	5
Silver Hill offered at	25		



## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

## Our Mint, its Rules, Charges and Operations.

In the columns of a contemporary we observe some exceedingly interesting statistics of mint matters for many years past, from which we glean the facts that the legal limit of wastage was \$207,766 99 for the three years ending April, 1857, while the actual loss was \$266,312 86, exceeding the limit some sixty thousand dollars. During the four years of Mr. Hempstead's Superintendency, the legal limit was \$235,386 39; while the actual lost was only \$4,520 35 being some \$230,000 less than the limit, and, in fact, a little under two per cent. of the amount allowed by law to be wasted. The wastage of the Philadelphia mint is twenty-two per cent., against two per cent., wasted by our branch mint. The total expenditures for three years under Messrs. Birdsall & Lott, amounted to the large sum of \$1,019,275 39. Under Mr. Hempstead, the total expenditures for four years were but \$1,150,648 14; while the difference between the last year of Judge Lott and the last year of Mr. Hempstead was upward of \$100,000 in favor of the latter. On retiring from the Superintendency, Mr. Hempstead left an unexpended balance of appropriation due the mint of upwards of \$86,000. This certainly is a capital showing for our mint, and speaks well for Mr. Hempstead's Superintendency. Under Mr. Stevens, the present Superintendent, we have no doubt everything will work in an equally satisfactory manner.

## For parting silver from gold when gold

is below 300-1000ths. fine. . . . . 3cts per oz.  
" from 300-1000ths. to 750-1000ths fine. 7cts " "  
" " 750-1000ths to 950-1000ths " 14cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
301 " 500, 7cts. " " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

## CORN AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skillful and scientific Professors of Philadelphia, and having made this branch of surgical science my specialty for nine years, enables me to operate skillfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can commend you with confidence to the citizens of San Francisco, as one of the most skillful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertions in the new and growing city of the Pacific.

## THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hacknied course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone;" "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye. How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and, with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who convene there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonably.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE:—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs.

Dr. Van Zandt,

Consulting Physician and Surgeon,

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity Made Subservient for the Cure of all Nervous and Spinal Diseases

**THAT THIS PRINCIPLE**, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanted by physicians to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

## Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

## Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

## No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRICAL excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

## To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct views of the origin of all their maladies. Ladies can consult him with entire confidence, as he is no speculator upon human ills—but is proving himself the only member of the legitimate profession in California who is really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately attuned nervous organism, together with their great sympathetic life, renders him doubly able to assuage those silent complaints which they bear so patiently and so long. No social disquietude need longer afflict their lonely chambers; for he can restore the stricken energies, restore the wanted tonic of the body; awaken the melancholic and desponding; arrest those drains which cause so much anxiety; cure those protean maladies which have so long

## Baffled the Skill of Physicians.

Devolve appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength; extreme debility and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exciting the Electro-Galvanic current, together with his remedial measures which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore you to usefulness, and spare you a blessing to your family and to society.

## All the World Over

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is as necessary to restore the ELECTRO GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and verified by hundreds of patients; so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unassailable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, mental and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or catarrhic habit of body.

## None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—depression of spirits which weigh you down—wakefulness that knows no sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you a radical removal of all bodily and mental infirmities, within the scope of science and man to remove.

## The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made these afflictions an especial study, and that he is the only Surgeon on our Coast, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataracts, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov 29—3m

C. W. THOMAS, Plaining Mill, California street, facing the Mission R. R. Depot, San Francisco. m1

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., Importers of Wines and Liquors, S. E. cor. Front and Sacramento sts. m1

DR. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner. ap16

KELLY & WADE, Importers and Dealers in Paints, Oils, Turpentine, Etc. Nos. 165 & 167 California street, Bet. Davis and Front. m16

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T. my23

PALMER, HANSCOM & Co. Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market. my13

ORO HOTEL, Fire-Proof Brick Building, No. 49 K street, Bet. Second and Third, Sacramento City, Jas. Smith, Prop'r. my10

A. S. ROSENBAUM & Co.—Importers of pure Havana Cigars, Tobacco etc., corner Clay and Battery, 25 and 27 Cedar street, New York.



## LOWER CALIFORNIA

## Colonization and Mining Company.

THE AGENTS SENT TO MEXICO BY the above Company having returned per steamer again, after having secured a tract of upwards of

**125,000 Acres**  
OF RICH AGRICULTURAL LAND,  
and a valuable silver Mine,

Company is now prepared to furnish exact information to Colonists who have already engaged, or those with the intent to engage in this

## SPLENDID ENTERPRISE.

It is proposed to send a vessel about the first of March next, and there being but a limited number of shares

NO TIME SHOULD BE LOST BY COLONISTS.

**Farmers Miners and Mechanics,**

with families are particularly invited by the authorities of the Territory. The land selected, in point of fertility of soil, is not excelled on the Continent. The climate is unsurpassed in the world. The richest silver mines known to exist in the Territory are in the immediate vicinity and bordering on the agricultural lands of the Colony.

N. B. Bear in mind that a share costs, at present, only \$200, which entitles the holder to free transportation for self, family, and articles of personal use and an equal share in the land, the Company's Silver Mine, etc. a whole enterprise, being for the mutual benefit of members only.

Full information can be had, and Mineral and Cotton specimens seen, by applying at the Office of the Company, North-west corner of Clay and Front Street.

## BOARD OF TRUSTEES.

A. G. RANDALL, President.  
Capt. JOHN H. BELL, V. President.  
O. F. GEHRKE, Secretary.  
Trustees.—J. F. LOVELAND, ISAAC LABOR, M. D. MATTHEWSON, H. C. PATRIDGE, I. ROWELL, M. D.  
Committee on Survey.—E. RICHARDS, Special Agent;  
Capt. R. C. ANDREWS, Surveyor.

**RASCHE & SONS,**  
411 Montgomery st., bet. Bush & Sutter,  
SAN FRANCISCO.

WHOLESALE AND RETAIL DEALERS IN  
**Pianos, Sheet Music**  
ITALIAN STRINGS,  
And Instruments of all kinds. Also,  
Sole agents for the celebrated manufacturers,

A. A. GALE & CO., New York;  
C. MEYER, Philadelphia.  
T. GILBERT, Boston;

Whose Pianos they have always on hand, for sale or rent

## PIANOS FOR RENT.

New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the Trade and to Professors of Music.

## WASHOE

**Stock Exchange,**  
N. E. cor. Montgomery & Merchant sts.  
SAN FRANCISCO.

L. W. NEWELL & CO.,

Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.

**DEVORE & COS.,**  
—AND—  
**STEAM ENGINE**  
**MACHINE WORKS,**  
Corner Market & Fremont streets,

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILLS, Irons, Flour Mills, Quartz Mills etc., etc., made to order and repaired.

ALSO,  
BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT Cutting  
AGRICULTURAL MACHINERY made and repaired.  
Duplicate parts of Threshing and Reaping Machines and Threshing Teeth made to order, on the most reasonable terms.  
Steam Engines and Boilers constantly on hand, and for sale cheap. Screw-Cutting and Turning Lathes for sale.  
DEVORE & CO.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms—any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,  
No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office.

**A. ROMAN & Co.,**  
WHOLESALE AND RETAIL

**Book Establishment,**  
417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigot on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman. Gold Mining and Assaying; by Philips.

Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake. Ure's Dictionary of Arts, Manufactures and Mines. Westbach's Mechanics of Machinery and Engineering. Nevill's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

Together with many other works in this and similar lines

Books imported to order on short notice. A. ROMAN & Co.  
417 & 419 Montgomery Street.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flame, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

**Comet Illuminating Oil!**  
Manufactured expressly for Stanford Bro.

## THIS POPULAR

**Brand of Kerosene**  
Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

**BEST FAMILY OIL IN THE MARKET.**

STANFORD BROTHERS,  
Nos. 121, 123 and 125 California street.

**Zur Beachtung für Erfinder.**

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Stizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

## Gird's Budding-Knife.

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentee.)  
San Francisco.  
sept 3m

## The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**  
AND A LARGE  
**CABINET FOR MINERALS;**

ALSO  
A Branch Telegraph Office,  
Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,  
Proprietors.  
San Francisco, Jan. 1st, 1863.

## MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments & Musical Merchandise  
**SHEET MUSIC & MUSICAL BOOKS.**  
GENUINE ROMAN STRINGS, &c.,

Light's New Patent Insulated Iron Frame  
is put into all of

LIGHTS & BRADBURY'S OVERSTRUNG PIANOS.

Wherever these instruments are known they

**RANK AS THE FIRST AND BEST**  
in tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

**MELODEONS AND HARMONIUMS,**

FROM THE CELEBRATED MANUFACTORY OF

**MASON & HAMLIN,**

Warranted superior to all others.

Send for a catalogue and Price list.

ec7 A. KOHLER, Agent.

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as MINING SUPERINTENDENT in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assorter of Copper Ore. He can give ample testimonials as to his capacity for the position he seeks.

Apply at this Office.

## PHILADELPHIA BREWERY,

Second St, corner of Folsom, SAN FRANCISCO

**Hoelscher, & Wieland Proprietors.**

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

Nov 9

**W. T. & J. GARRATT,**

**City Brass and Bell Founders**

Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."**

F. G. BEPLER,

**Practical Coppersmith**

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery, SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work. All orders from the country promptly attended to.

## FREDERICK KESMODEL,

**Cutler & Surgical Instrument Maker,**  
817 KEARNY STREET,

Between Jackson and Washington streets,  
SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1863, also in Sacramento in 1863 for California made Cutlery.

The attention of those affected with HEINIA, or Rupure, or any one interested, is called to his new method of fitting and adapting Trusses to the different case. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are uncertain and cannot be relied on and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.  
FREDERICK KESMODEL,  
Inventor and Patentee

ap3 tf

## LABOR-SAVING

**Rock Drilling Machine,**

TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE and quarrymen. The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

**HAND, HORSE, AND STEAM-POWER MACHINES.**

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way.

A FOUR-HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process. Address orders to

WM. W. DUNN,  
Fremont street, bet. Market and Mission, San Francisco.

## LATEST IMPROVEMENT

**in Ladies' Buckles.**

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERICK REICHEL,  
Manufacturing Jeweler,  
620 Merchant street, San Francisco.

## REMOVAL.

OFFICE OF THE PACIFIC METALLURGICAL Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased. COPPER ORES—Highest market rates advanced in cash, for shipments to S. C. BRADSHAW, Agent, 318 California street, near Sansome, up stairs.

## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

## FULTON FOUNDRY &amp; IRON WORKS

HINCKLEY & CO.,

MANUFACTURERS OF STEAM ENGINES,

Quartz, Flour and Saw Mills; Cast iron Fronts for Buildings, Mining Pumps, and all kinds of Machinery Amalgamators, Etc.

**Nos. 47 & 49 First Street,**

Between Market and Mission, San Francisco.

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to Iron when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.

D. B. Hinckley, Wm. E. Worth. Wm A. Field.



**OFFICE OF OPHIR SILVER MINING CO.,** San Francisco, Feb. 6th 1863.—A dividend on the capital stock of this Company has been declared, payable on and after the 9th inst. The transfer books will be closed from this date until the 9th inst.

feb6 N. K. MASTEN, Secretary pro tem.

## P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

### FOR PANAMA.

The following Steamships will be dispatched in the month of February, 1863.

#### February 1st, Steamer Sonora.

" 11th " Constitution.  
" 21st " St. Louis.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidesdorff sts.

### TO THE CLOCK TRADE.

WE HAVE RECEIVED, EX RECENT FLEET OF CLIP-PERS, a fine assortment of the

NEW HAVEN COMPANY'S,  
(FORMERLY JEROME)

## CLOCKS,

Comprising all the Desirable Styles. Also a Large Lot of

Fancy Time Pieces  
OF NEW AND BEAUTIFUL PATTERNS.

We shall in future be in receipt of sufficient quantities of the above goods to supply our largely increased trade.

HAYNES & LAWTON, Agents N. H. Clock Co.  
Nos. 516 and 518 Sansome st., cor. Merchant,  
San Francisco.

ja 26 tf

## SQUARZA'S PUNCH.

### FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.

### ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidesdorff street,

Opposite the What Cheer House, San Francisco.

## V. SQUARZA'S Punch Factory.

**MR. SQUARZA IS FAVORABLY** known in this State for his Anti-Divorce Liqueur and similar productions, as manufactured by him. We may mention that Mr. Squarza is an fait in the chemico-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff; the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Run Punch,	Strawberry Punch,
Cognac do.	Whisky do.
Arac do.	Kirschwasser do.
Anti-Divorce Punch,	Cocoa do.
Coffee do.	
Tea do.	Morning Comfort,
Pineapple do.	Kuennel,
Anisette,	Brandy Cocktail,
Kirschwasser,	Anti-Dyspepsia Bitters,
Appetiser,	Ladies' Tears.

And CHAMPAGNES of all brands.

### PEOPLE'S

## Steamship Line!

### CONNECTING

CALIFORNIA AND NEW YORK,  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

MOSES TAYLOR,  
E. HOWES ..... COMMANDER,

Will be dispatched for

San Juan del Sur,

From Mission street Wharf.

Punctually at 9 o'clock, A. M., on

WEDNESDAY, - - - MARCH 11, 1863.  
Connecting at GREYTOWN with the Splendid Steamship  
ILLINOIS ..... 2500 Tons.

Reduced rates of Passage and quick trips are secured by the re opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers

For further information apply to

I. K. ROBERTS, Agent,  
a20 No. 407 Washington Street, opp. Post Office.

## DONAHUE'S

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

**MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices.** Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.

PETER DONAHUE.

## LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
LEWIS COFFEY J. N. RISDON.

## GREAT REDUCTION IN PRICES.

STANFORD BROTHERS,

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

## Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPEARM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

### TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

### THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300.) and to any kind of machinery, will Save in Transportation Material and Labor, from 25 to 50 per cent. of the entire cost of the Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan 19-1f

## Holiday Presents!

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

BRAVERMAN & LEVY'S,

621 Washington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. Also,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY,

No. 621 Washington Street,  
Facing Maguire's Opera House.

## LEANDER RANSOM,

Civil Engineer

AND

## SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

## STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

## REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## For Sale Cheap!

**A HORIZONTAL STEAM ENGINE OF** 4-Horse Power, Flue Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,  
Federal Building, cor. Battery and Washington Streets, No. 23.

### DEETKEN'S

Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON.** ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 10 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mail owners. No power nor clean water required for be purpose. nov-3m

## SQUARZA'S PUNCH.

### HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff St., near Sacramento.  
Branch at 406 Montgomery street. my30

### JULIUS SILVERSMITH,

Commissioner for Nevada Territory,

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets.,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

### JAMES PHELAN,

(LATE J. & M. PHELAN.)

IMPORTER AND JOBBER,

Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-1f.

## THEODOR KALLENBERG,

Maker of Models

FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and the Sinking, Embossing Stamps.** Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
a ut 3m) SAN FRANCISCO.

### PALMER, HANSCOMB & CO.,

GOLDEN STATE FOUNDRY

AND MACHINE WORKS.

First Street, near Market, San Francisco,

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications.

Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast.  
San Francisco, November 29, 1862. 3m

### 50 lbs. MARINE AND

## Fire-Proof Paint,

**MANUFACTURED BY THE PACIFIC METALLURGICAL** Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, and one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chaudlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

### 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

### DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FORTY, Superintendent.  
WORKS, North Beach; Office, 318 California st., San Francisco.





A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, MONDAY, FEBRUARY 16, 1863.

NO. 16.

#### ESMERALDA CORRESPONDENCE.

AURORA, FEB. 9th, 1863.

MR. EDITOR:—In my letter of Jan. 30th, I promised to keep you posted in regard to our doings in this district. I have little to communicate in the way of discoveries this week, excepting the Horne Lode which was found a few days since, and is now the theme of conversation. The ore looks well, but whether it will carry the owners out of the little or big end of the horn, time alone can demonstrate.

#### THE BODIE DISTRICT.

The great excitement of the day is the Bodie District, which is situated about ten miles South-west of Bodie Creek. The new mines are just below the old diggings. A large number of well defined lodes have been staked off and recorded in the local district office. The rock is of a copper color and contains a small percentage of copper. Rock taken from the top of a number of the best newly discovered lodes assays from \$50, to as high as \$400 per ton. A new town has been surveyed and lots are held at high figures, while several new houses are in progress of construction—the present fine weather being favorable to the prosperity and progress of the new City.

#### THE TUNNELING INTEREST OF THIS DISTRICT

As has been little noticed, although it is one of the greatest importance to the prosperity of the place. These tunnels are mostly heavy undertakings and penetrate to a great length and depth into the several hills upon which they are located, thereby prospecting to a great depth all of the veins of quartz that are intersected by the course of the tunnels through the hills. This kind of mining appears to be generally overlooked by speculators, little or no enquiry being made for it, when in fact it is one of the best and safest mining investments offered to purchasers. Stock-Brokers and other mining operators have been generally backward in coming forward and taking hold of this kind of stock, for the reason that they are, as a general thing heavy and expensive enterprises, and a long period must elapse before a return can be reasonably expected from the capital thus expended. There is more solidity and permanency in the great majority of the stock of Tunnel Companies than in many Quartz Lodes which are now being sold at high rates; the local laws of this district are very liberal in their application to Tunnel Companies.

#### TUNNELS ON SILVER HILL.

On Silver Hill there are now located and in active operation, four Tunnel Companies. The first location is the Union Tunnel, situated near the base of the hill, on Esmeralda Gulch—commencing on the East side and running westward, passing through several valuable lodes. The work has steadily progressed since its location and it is now in several hundred feet. It is the oldest location on the hill, and is incorporated. One draw back to the stock of this Company is that the line of its location runs parallel with the Quartz Lodes, instead of at right angles, or nearly so, as it should do. This is the case with all except the St. Louis. Next above is the Ruth and Winsdor Tunnel, below Perry's

Mill—the right of way for 500 feet is claimed by this Company, with 2000 feet of croppings, and fifteen blind lodes, of 500 feet on each side, making in all 17000 feet of ground, incorporated, November, 1862; capital stock \$100,000; shares 1000 at \$100 each; place of business San Francisco.

On the North-west side, on Cotton-wood Gulch, is the American which was located last September, by William P. Pool & Livingston of your city (not James M. Livingston) and incorporated with a capital of \$600,000, with 1000 share of \$600 each. The company claims twenty blind lodes with the right of way for 2000 feet, and they have pushed the work forward with great energy. The tunnel is  $6\frac{1}{2}$  feet high and 5 wide, with an ascending grade of one in to each rood, and has now nearly two hundred feet of tunnel excavated. It runs at right angles or nearly so with 50 or more of the best lodes in Silver Hill. When at the distance of 1000 feet, the end of the tunnel will be at least 500 feet below the surface of the ground. The last and at the same time one of the most important tunnel enterprises on this hill, if not in the district is the Lady Gertrude. This tunnel was located, and is owned and worked by James M. Livingston, Brewster & Kinkade of San Francisco. Their tunnel penetrates the hill at the lowest point and when it reaches the Old Winnemucca, its depth from the surface of the hill, will not fall short of some 700 feet and in its course will intersect many valuable gold and silver bearing lodes. It is worked by contract, night and day, at the cost of \$10 per foot—400 feet are claimed on each side on every blind lode through which the tunnel may pass. The work of the tunnel is superintended by F. K. Becktel, Esq., a pioneer of the place, a practical miner and an honest and straight forward citizen.

#### ON MIDDLE HILL

is located the oldest tunnel in the district, as well as one of the cheapest worked and best conducted Companies on this side of the mountains. Middle Hill tunnel commences at the North end of Middle Hill, about 300 feet South of Court House Square, and runs parallel with the general course of the hill, cutting through at right angles some six'y or seventy rich and valuable quartz lodes. It has now reached nearly five hundred feet, and has passed through two most excellent blind lodes, one of which is over ten feet in thickness and prospects well in both gold and silver. The right of way is claimed for 1800 feet, and fifteen blind lodes of 2000 feet each, making a grand total of 30,000 feet of mining ground. The tunnel is six and a-half feet high and five feet wide, with one inch descending grade per rood. It was located in August, 1861, incorporated as a Joint Stock Company, in September, 1862, with a Capital Stock of \$250,000 with 1000 shares of \$250 each. On the East side of Middle Hill is also located the Montezuma, which claims similar rights and privileges as other Companies. The tunnel is an excellent looking piece of work, with a good car and car-track. It has now reached the distance of 230 feet into the hill. In my next communication I shall notice Aurora, Pennsylvania, Nevada and Discovery tunnels on Last Chance Hill, and Martinez and Lady Wealthy on Martinez Hill.

#### IRON FOR THE PACIFIC.

The rapidly increasing demand on the Pacific Coast, for that great staple of commerce—iron, renders the early establishment of furnaces for the reduction of iron ore at some convenient point on the Coast a matter of quite urgent necessity. Iron ore of a very fine quality, has been discovered in various parts of California, but, as yet, at a very great distance from steam communication with the seaboard, and at points impracticable for the delivery of coal for smelting. For many years to come, the above conditions, and the high price of labor and transportation, must preclude the possibility of California becoming a producer of iron, although she is rapidly becoming a consumer of that article.

This great commercial need, however, might soon be supplied from a neighboring State in Mexico. Recent explorations have brought to the attention of persons skilled in the manufacture of iron, an immense deposit of that ore in the "Cerro de Mercado," in the immediate vicinity of the city of Durango, the capital of the State of that name in Mexico. The ore in question appears to have formed a mountain of iron, similar in character and formation to the famous iron mountain in Missouri. Messrs Jose Subizar, Alfred A. Green and James Snegan have "denounced" the mine, according to the Mexican Laws, and thus obtained legal possession of the same. These gentlemen have forwarded to this city several hundred pounds of this ore which may be seen at this office, and which is pronounced by competent judges, as containing fully 80 per cent. of iron. The ore is exceedingly rich and quite malleable, even in its native state. It exists in inexhaustible quantities at the mine and may be easily taken out and smelted on the ground. Good coal in abundance is found in the immediate vicinity. The mine is situated only half a league from Durango, between which and Mazatlan is a good road, which in time must undoubtedly give place to a railroad.

The gentlemen above named are anxious to organize a Company for the purpose of erecting furnaces and machinery for smelting the ore and manufacturing the iron upon the spot.

Certain citizens of Durango are willing to take a large amount of stock in the Enterprise, provided the right kind of a Company can be organized, and placed under the management of citizens of the United States, and directed by persons of experience and energy, who are thoroughly acquainted with the business. There is quite a growing demand for iron in the interior of Mexico, and the facilities for its transportation to tide water are such as must give it an advantage in this market, over that produced in any other part of the world. The attention of capitalists and iron men is particularly called to the Enterprize.

SCOLDING.—It is better a woman should scold than do worse. Better for you to endure the present ill than fly to others you know not of. No one relishes the noise of scolding. But, then, scolding may have its advantages. No one likes the noise of a boiler blowing off steam; but it saves the boiler from bursting, we should be content to endure it.



## BODIE MINING DISTRICT.

This new mining district which is incidentally referred to by our Esmeralda correspondent to-day, and which has come into especial notice within two or three weeks past, is located about ten miles South of Aurora City, Esmeralda. The locality was first discovered by some Frenchmen, as early, we believe, as the summer of 1858. It was worked as placer diggings until the summer of 1860, when some of the disappointed adventurers to Washoe turned their steps Southward, and prospected along the base of the Eastern Slope until they reached Esmeralda, where they made a halt. From this place a small party went on still farther West, until they encountered the Frenchmen, above alluded to, with their rockers, washing the golden sands from the limited placers of what were thereafter known as the "Bodie Diggings." The new proprietors were looking for "indications," and were soon elated with the discovery of gold and silver bearing rock, which led at once to considerable prospecting. Barely work enough, however, was done to develop the presence of promising ore, but not enough to warrant the erection of machinery at that early period, and under the almost total lack of roads.

Matters were thus allowed to rest until some time last fall, when a Company, made up chiefly of San Francisco and Sacramento Capitalists, recommenced operations there, and with such flattering indications, that a consolidation of some eleven companies was made into one incorporated body under the name and style of the "Bodie Bluff Consolidation and Mining Company," with Governor Stanford as President, and F. K. Becktel, Esq., as Secretary. Their operations thus far have met with the most encouraging results.

About the middle of last month, the town of Aurora was all excitement with golden stories from the Bodie Mines, and "everybody" went out to see the rich strike that had been made, and came back fully satisfied that there was a "good thing" there for "somebody."

Favored by the unusual mildness of the winter the Company has been able to push on its operations with an unusual degree of vigor. About two weeks since, Mr. T. J. Hubbard, Superintendent of the Consolidation Co., according to the Aurora Star of the 31st ult, came into town with some ten pounds of very rich ore from the Company's "New Mexico" Shaft. This vein has been opened to a depth of about eighty feet, and exhibits a character of most unquestioned richness. The vein is six feet wide. Tunnels are being run into the Isadora, and others of the Company's claims which are most promising in their "indications." The Company own eleven distinct leads, the most of which are known to be very rich.

There are two other Consolidation Companies in this district, in active operation. Mills will doubtless soon be put in operation there. The nearest mills, at present in operation, are nearly six miles distant from Bodie, on the road to Aurora. Important results may ere long be expected from this new locality.

**MINERS WANTING WATER.**—Much complaint is now being made in nearly every section of the mines, at the lack of water for mining purposes. The rivers are unusually low, and many small creeks and gulches which usually furnish an abundance of water for their respective localities, during the winter months, are now almost dry. The scarcity of water the present season affords a striking contrast to the floods that poured over the country one year ago. Late advices from Lower California say that the "early and latter rains" have not yet (up to Jan. 7th.) made their appearance there, while the natives insist that the "rainy season" has fully passed.

**MINING IN NEW ZEALAND.**—Several Quartz Mills have recently been put up near Auckland, in New Zealand. The mines are said to be very rich and the leads very largely developed. At the latest dates from there, it was expected that the problem would be solved in a few days.

**THE house of a Mr. Longley, in Hopkinton, Mass.,** took fire lately in the absence of most of the male inhabitants. The ladies, therefore, got out the engine, dragged it to the fire, maned the brakes, and the fiery element soon went out in a sizzle.

## SILVER IN CARIBOO.

The British *Colonist*, published at Victoria, of a late date, claims that rich silver and gold bearing rock has recently been discovered in Cariboo. The mines have lately been visited and examined by a scientific gentleman, who fully confirms the reports. These silver veins are found on the Sougues Creek, and about fifteen miles North of Quesnelle village. Two companies have been organized, and have taken up claims. A quantity of the rock has been taken to Victoria, and it assayed from \$250 to \$300 per ton in silver and \$50 in gold, and 800 pounds of galena. The rock was from a depth of only five or six feet. It is said that the ore very much resembles that of the Comstock lead in Virginia City. It is expected that it will rapidly increase in value as it descends. The above may all be genuine, and we sincerely hope it is—but we greatly fear it will prove only the initiatory steps in the programme for another Cariboo excitement.

## WASHOE MINING CASES.

The following Mining Cases now pending before the First District Court, in Nevada Territory are set for trial as follows:—

Feb. 26—California Co. vs. Charles Anderson et als.

Mar. 10—Robert R. Moss vs. Gould & Curry Gold and Silver Mining Company.

Feb. 27—Frank Perkins vs. Sierra Nevada Mining Co.

Feb. 20—Burning Moscow Company vs. Madison Mining Company.

Mar. 12—Chollar Silver Mining Company vs. D. S. Turner.

Mar. 6—La Crosse Mining Company vs. Burning Moscow Mining Company.

**A MINING TRANSACTION.**—A miner from the mountains stepped into the salesroom of one of our most wealthy merchants, about four weeks since, stated that he was "flat broke," and asked for \$150, offering to make over to the aforesaid merchant, a mining claim for the money. The merchant, knew nothing of the man or his claim, but gave him the money and took his bill of sale. He thought no more of the transaction until a few days since, when a stranger called at his place of business and asked him if he was the owner of such a claim. Receiving an affirmative answer, the stranger offered him \$4,000 for the same. The merchant hesitated a moment when the stranger added another thousand to his offer. The merchant immediately closed with his visitor and pocketed the cash without any further remarks. The merchant is still ignorant as to whether he sold a folly or a fortune.

**LARGE TREASURE SHIPMENT.**—The treasure shipment per steamer Constitution, on the 11th, was as follows:—

To New York.....\$1,272,724 43

" England..... 907,847 86

" Acapulco..... 5,000 00

" Panama..... 5,000 00

Total shipment.....\$2,190,572 29

One million of the above was shipped on Government account.

**ESMERALDA POST OFFICE.**—Much confusion exists with regard to the proper direction of letters for Esmeralda. They should be addressed thus: Mr. —, Esmeralda, Mono Co., Cal.

There is only one Post Office in the County, and that is located in the town of Aurora. When the petition for an Office was sent to Washington, "Aurora" was named as the designation of the Office; but as that name is so common, the Department thought proper to adopt the name of "Esmeralda." It would be well, we think, for the citizens of that enterprising mining camp to change the name of the town to correspond with the Post Office. It would be more distinctive and less liable to create confusion.

**THE MINES IN CHILE.**—The silver mines of Atacama exported 800,000 ounces of silver in bars, 8,000,000 pounds of silver ore, 8,000,000 pounds of copper in bars, and 70,000,000 pounds of copper during the first eight months of 1862.

At the Annual Meeting of the Stockholders of the Melones and Stanislaus Gold, Silver and Copper Mining Co. the following persons were elected as Trustees for the ensuing year: L. Caralis, C. C. Grellet, B. E. Auger, A. C. Gay and Gabriel K. Stevnot; and at a Meeting of Trustees held the same day the following Officers were elected: El. Cazalis, President; G. Dussol, Treasurer, and L. Franconi, Secretary. Office at North-east corner of Montgomery and Jackson Streets, Room No. 16.

**THE Hope, Gold and Silver Mining Company,** situated in Prince Royal District, Humboldt County, Nevada Territory, is now fully organized. The Officers and Trustees are Sidney Johnson, Esq., President; Leon Mejjasson, Treasurer; L. Eranconi, Secretary, and Messrs. B. E. Auger, Michel Sehetard and A. Pavillier, Trustees. Office, North-east corner of Montgomery and Jackson, Sts., in Room 16.

**MARRIAGE OF M. GUIZOT.**—The somewhat romantic circumstance that led to the marriage of M. Guizot is quite generally known. We give it, however, for any one who is not familiar with it:—

Belonging to a family of distinction, but which had been ruined by the revolution, Mlle. Pauline, de Meulan had found her resources in an education as solid as it was varied, and in order to support her family she had entered the difficult and absorbing career of journalism. She was the editor of the *Le Publiciste* when a severe illness caused by overwork obliged her to interrupt occupations so necessary to the welfare of those she loved. She found herself in a critical position; she was despairing, when one day she received an anonymous letter in which the writer begs her to be at ease, and offers to perform her task during the period of her illness. This letter was accompanied by an elegantly written article, the ideas and style of which were, by a refinement and delicacy exactly modeled upon the manner of Mlle. de Meulan, who accepted the article, signed it, and regularly received a similar one till the end of her convalescence. Deeply touched by this event, Mlle de Meulan did not fail to relate her adventures in the drawing room of M. Saud, exhausting herself in enquiries, and not thinking of a pale and serious young man whom she scarcely knew, and who gravely listened as she formed all sorts of conjectures. Earnestly entreated, through the columns of the journal, to make himself known the generous incognito finally decided to go in person and receive the thanks he so well merited. It was the same young man to whom we have just alluded, and five years after Mlle de Meulan was Madame Guizot.

**REMEMBERED AND MOURNED.**—A sad and truthful picture is the following:—

For every man who falls in battle some one mourns. For every man who dies in hospital wards, and of whom no note is made, some one mourns. For the humblest soldier shot on picket, and of whose humble exit from the stage of life little is thought, some one mourns. Nor this alone. For every soldier disabled; for every one who loses an arm or a leg, or who is wounded or languishes in protracted suffering; for every one who has "only camp fever," some heart bleeds, some tears are shed. In far-off humble households perhaps, sleepless nights and anxious days are passed of which the world never knows; and every wounded and crippled soldier who returns to his family and friends, brings a lasting pang with him. Oh! how the mothers feel this war! If ever God is sad in Heaven, it seems to me it must be when he looks upon the hearts of mothers. We who are young think little of it; neither, I think, do the fathers or brothers know much of it; but it is the poor mothers and wives of the soldiers. God help them.

**A RATHER TOUGH STORY.**—A learned dissertation was held, the other evening, upon the subject of "Bed-bugs and their remarkable tenacity of life." One asserted that they could be boiled and then come to life again. Others said that they had soaked them for hours in turpentine without any fatal consequences. Old Blood, who had been listenin' as an outsider, here gave in his experience in corroboration of the facts. Says he, "Some six years ago, I took a bed bug to an iron foundry, and dropping it into a ladle where the melted iron was, had it run into a skillet. Well, an old woman used that skillet pretty constantly, and here the other day it broke all to smash, and what do you think, gentlemen, that ere insect just walked out of his hole, where he'd been layin' like a frog in a rock, and made tracks for his of roost up stairs! "But," added he, by way of parenthesis "by George, gentlemen, he looked mighty pale."

It is said that in England three hundred families contr the Government, a few thousand landlords own all the soil—five men own one fourth of Scotland, and five millions of adult men have no voice in the Government.



# MINING AND SCIENTIFIC PRESS.

## SAN FRANCISCO MINING NOTICES.

### ASSESSMENTS LEVIED.

Assessments upon Mining Stock have been levied as follows:—

Caledonia G. & S. M. Co. levied an assessment, Feb. 1, of 50 cents per share, payable immediately. Sale of delinquent stock will be made March 7th.

Moss G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 50 cents per share, Jan. 27, payable to the Secretary, at 28, Montgomery St.

Warren G. & S. Mining Co.—An assessment of 75 cts. per share was levied Jan. 26, payable to the Supt., at Virginia City, or to the Sec., 428, Montgomery St.

Warren G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable to the Sec. in this city or to the Supt. at the mine.

El Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to the Supt.

Gaudaloupe S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or to the Superintendent at the mine in Aurora, (Esmeralda.)

Dios Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cents per share was levied Jan. 24, payable immediately.

Sonoma Mining Co.—An assessment of 25 cents per share was levied Jan. 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Adriatic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norcross.—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skae, at the Mine, on or before Feb. 25.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount David-on Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

### ASSESSMENT SALES OF MINING STOCK.

North Potosi Mining Co.—Sales delinquent stock will be made March 17.

Peytona G. & S. Mining Co.—Sales of delinquent stock will be made March 1st.

Sales of Stock for non-payment of assessments are advertised to be sold as follows:—

Cole Silver Mining Co.—Sales by Jerome Rice & Co., 327, Montgomery St., San Francisco, on the 25th of February.

Combination G. & S. Mining Co.—Sale by E. S. Spear & Co., at 433 California St., on the 10th day of March next.

Norman S. M. Co.—Sale by John Middleton & Son, 40 Montgomery Block, on Feb. 16.

Burning Moscow.—Shares of this Company, in arrears for assessments will be sold at auction, Feb. 9.

### COMPANY MEETINGS.

The Lewis G. & S. Mining Co.—Annual Meeting will be held at 622 Merchant St., Feb. 12, for election of officers.

Ida G. & S. Mining Co.—A Meeting of Stockholders will be held at 522 Montgomery St., San Francisco, February 17th.

North Winnemucca G. & S. M. Co.—A meeting of the Trustees will be held at the Company's office, in this city, on Friday, Feb. 20, for the election of Officers, etc.

Baltimore America Consolidated.—An assessment of 50 cents per share was levied, Jan. 5.

Savage.—An assessment of \$35 cents per share was levied, Jan. 7.

Hawley.—An assessment of 25 cts. per share was levied Jan. 5, payable in 30 days.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

Henry Martin G. & S. M. Co.—"Thomas Wallace, Trustee," gives notice that whereas certain parties illegally claiming to be Trustees of this Company, have changed the name of the Corporation to the North Star G. & S. M. Co., and illegally elected officers for the same, the public are cautioned against such acts, etc.

RED, WHITE AND BLUE G. & S. M. Co. levied an assessment of 25 cts per share, payable on or before Feb. 1st, office cor. Pine and Montgomery Sts.

Live Oak Copper Co.—The Annual Meeting of Stockholders for election of Trustees, will be held at Office, in Montgomery Block, Feb. 2, 1863.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

Mina Prieta S. M. Co.—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

Franco-Americano S. M. Co.—The following persons were elected officers at the meeting of trustees, Dec. 26th—Chas. F. Gaian, *President* and A. S. Gould, *Secretary*. The office of this Company has been removed to No. 528, Clay street, Room No. 2.

Central Silver Mining Co.—The Annual Meeting for the election of Trustees will be held Jan. 13, at Office, No. 712, Montgomery street.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

Desert Mining Co.—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

Keystone Copper Mining Co, advertise for proposals to purchase or treat 3d quality copper ore. Proposals received till Jan. 15th.

Hale & Norcross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and O St., Virginia City.

Norman S. M. Co.—Middleton & Sons, No. 40, Montgomery Block, will sell delinquent stock of this Company, February 16th.

Baltic Mining Co.—Notice is given of an adjourned sale of shares in this Company, to take place on the ground, Jan. 31st.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Eldorado G. & S. M. Co.—An assessment of one dollar per share was levied, Dec. 31, 1862, payable, Jan. 22, 1863, to the Secretary, at corner of Montgomery and California streets, or to the Superintendent at Virginia City.

Texas Co.—Tennessee Ledge.—An assessment of 25 cts per foot was levied, Dec. 22, payable on or before Jan. 21 1863.

The North American Co., Gold Hill, will sell at auction Jan. 31, stock of shareholders delinquent in payment of assessments.

MARTIN WHITE MINING COMPANY.—An assessment of ten cents per foot has been levied, payable to the Secretary, at office on C Street, Virginia City.

THE SWEENEY Co., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Bach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

## ESMERALDA MINING NOTICES.

THE ZENOBIA LODE COMPANY, give notice that they claim a superior title to the Johnson Co., claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder,

ORE TESTS.—Several inquiries have been made to us of the different chemical tests that will discover traces of silver and copper in the rock. If our friends who are conversant with this matter will forward information respecting such chemical tests to us, we will be happy to give them publicity. [*Amador Ledger*].

Persons interested in the above will find the desired information, and much more in the same connection, all valuable to copper and silver prospectors, in late numbers of this paper. A remittance of six months or a years subscription to the MINING AND SCIENTIFIC PRESS, will afford them all the valuable information obtainable from books in relation to prospecting for either silver or copper, and assaying and testing ores of the same. The dissemination of that class of information is the speciality to which this paper is devoted, and no mineral prospector in the silver and copper regions of California can invest \$4 to better advantage than by sending the same to this office and becoming a subscriber and reader of the PRESS. We shall be extremely happy to receive the names of all who may favor us with cash patronage. We also pledge ourselves at the expiration of the year to refund to any party double the amount of his subscription, who may honestly think he has not got the worth of his money in valuable information from our columns.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of every thing generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$5.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EVER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



# Mining and Scientific Press.

W. B. EWER, EDITOR.

MONDAY EVENING.....FEBRUARY 16, 1863.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, Proprietors.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing.

JOB WORK—executed with dispatch at the cheapest rates.

PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## MINING INCORPORATIONS.

Notwithstanding the attempts at editorial pleasantry that are so frequently indulged in by our contemporaries, at the lengthening list of mining Companies, and the cumulative exhibits, of the many millions of capital which they represent, "our paper," each passing month brings additional evidence that this wealth is far from imaginary. The constantly increasing values of the figures which appear in our weekly stock reports, appended to the leading mines on the Eastern Slope, are stubborn facts, which must soon make plain to the most unbelieving that the footings of the aggregate "capital," placed as a value upon the mines now in progress of development, are not much too high. Imagination can scarcely form any adequate conception of the mineral wealth, which is soon to be developed on the Eastern Slope, and throughout the entire length and breadth of the "Great Basin," whose Western and Eastern rims are formed by the rocky slopes of the Sierra Nevada and Rocky Mountains.

Several of these earliest formed Companies, which, in the estimation of the great mass of people at that time, fixed their capital stock at an almost fabulous figure, have already reached the immediate vicinity of their incorporate value, and their stock will no doubt, ere long, be quoted at a handsome percentage "above par." Indeed, one of them has already exceeded its par value and is quoted to day at more than 60 per cent. advance.

Numerous others, second and third class mines, are making such favorable developments, at the present time, as give good earnest of an early approximation of their stock to par value.

A few years since scarcely a merchant in San Francisco could be induced to invest a dollar in any mining enterprise. To do so was to lose *caste*, and endanger one's credit "on change." Even our foundrymen, could not be induced to invest a dollar, in a business to which they were then, as now, indebted for almost their entire business. Now things are entirely changed, and one can scarcely find a man in San Francisco who does not own "feet" in some mining claim.

What matter is it if a large portion of these projected companies should fail? All, or even a majority cannot hope to succeed. A sufficient number, however, will prove so remunerative as to return a handsome aggregate percentage on all the money invested. Hitherto the chief burden and losses attendant upon opening up the mines of California, have fallen upon the mining community almost exclusively, while the commercial and agricultural interests have been greatly profited at no risk. It is one of the conditions of mining, everywhere, that many individual losses must occur, which, however, are always made good in the general aggregate of profits; and it is creditable to the mercantile interest of this city that it has now taken hold of the matter of developing the mines of the State and is freely pouring out its capital for that purpose. The aggregate of these investments cannot fail to be highly remunerative, and will reward the losers even, in the increased business which they will create and concentrate in San Francisco. This

city owes its very existence to the mines, and it betrays a feeling of selfishness in any man of means, to refuse to do his part in developing the interest upon which its prosperity depends. Every new Mining Company, whose organization is announced, is evidence that a new mine has been discovered, and that somebody intends to spend a little money for its development. Every such item is a matter of encouragement, and indicative that the great interest of the State is progressing. We trust the day is far distant when we shall fail to find in each morning's paper the announcement that some new mining organization has been effected during the previous day.

## MINING EDUCATION.

In our last issue we referred to some of the disadvantages under which the California miners, as a class, labored by reason of the lack of a proper Mining Education. We also adverted to the fact that the popular antipathy against the application of science to mining, which was so prevalent among California miners, six or eight years since, has lately been pretty much laid aside. It is now very generally conceded that an empirical knowledge of mining is not the way to succeed in that difficult and uncertain branch of industry. The occurrences connected with the discovery and development of our silver and copper mines have produced such a change in public sentiment that, at the present day, it is rare to find a man who will openly avow, even if he secretly entertains, a belief in a necessary antagonism between theory and practice. Practice and science have now joined hands in the mines, and the time has passed when the former will venture "to go it blind" in the vain confidence of shallow empiricism, unaided by science.

The attainment of a passable mining education, when proper facilities and instructors are at hand, is not a work of so much time and study as many suppose. The difficulties and mysteries involved in becoming an expert in planning and working a mine, and in acquiring a practical knowledge of their geological and mineralogical characteristics, are no greater than are to be met with in many other subjects in the usual programme of practical and theoretic education. Experience is the foundation of success in all human undertakings; but the only value of experience is the facility which it affords us to deduce from previous results, a knowledge by which to overcome new or greater difficulties. This is identical with the inductive process of the man of science. But he that confines himself to his own limited experience, shuts his eyes against the lights of science; and, in despising the experience of others, he will soon find himself buried in the darkness of empiricism, while those who have entrusted him with their business will surely behold their undertakings enveloped in a labyrinth of difficulties, which must sooner or later result in common and promiscuous ruin.

A large mine is a complicated machine, and we might with quite as much propriety place a ploughman, with no mechanical experience, whatever, in charge of a double cylinder printing press, as to place a man, whose experience in mining is confined to what he has done himself, in charge of a mining operation of any magnitude. The art of mining involves a general knowledge of mechanics, surveying, mineralogy and geology. To understand working a mine—boring, sinking, pumping, winding, stoping, hauling and ventilation a tolerably correct knowledge of every leading principle in mechanics is needed. Without such knowledge the miner will find it impossible to decide upon the most economical means and arrangements for transport either in the mine or on the surface, the kind and capacity of engines needed, or the character and class of machinery best calculated to perform the work before him. Laying out the work properly, each part with reference to another, requires a knowledge of surveying. To ascertain the proper place to sink shafts, involving calculations of the dip and strike of strata, probability of water, faults, &c., implies a knowledge of geology: while by the aid of mineralogy only, can he determine the nature and value of the minerals upon which he is working, or which may chance to come in his way. On a correct conclusion with regard to each and all these points depends the success of the undertaking. The employment of experienced men with liberal salaries, to superintend works of this description may safely be predicted as uniformly resulting in larger dividends to stockholders, and increased safety to mine and workmen. Experience, coupled with a

proper application of science, is the only foundation of fitness for the position of Mining Superintendent. The lack of these requisites has cost English adventurers millions of pounds sterling—sometimes in the faulty opening of a mine, at others in the lack of mineralogical knowledge for determining the value and character of the mineral when found. We gave several instances of the latter in our last issue, we might multiply instances of the former *ad infinitum*.

It is to the lack of this latter information that we must attribute the delay in the development of the silver and copper mines of the State, a full decade beyond the time when their existence should have been known as the result of actual explorations.

There is but one way to remedy the evils here passed in review and provide our State with a competent corps of mining engineers and superintendents—*A School of Mines must be established under the patronage, and partial control of the State.* An institution of this kind is absolutely necessary to a proper development of our resources. We need it as a collector and conservator of mining knowledge past and progressive. We need it as an institution for the general diffusion of information in this branch of industrial science. We need it as a place where the working miner, the proprietor and the engineer may be drilled and schooled in the art of mining, in all its bearings. Such schools have long been in existence in nearly every country in Europe, where they are fostered with the greatest care by the different governments. We shall endanger our reputation as a progressive people if we much longer delay a movement in this direction. The losses of property and misdirected outlay of capital already scored up, (to say nothing of the sad loss of life,) and laid at the door of inexperience, would have literally endowed half a score of such schools.

Our State Geologist, in his address before the Legislature two years ago, advised the early establishment of such a school. We have now a Legislative Committee on Mining. Is there any more important matter which can come before them than that which we are now discussing? Have they ever thought seriously upon it? If so, or if not, heretofore, why would it not be well, at the present time, to prepare the general outlines of a plan for such an institution, and let it go before the people, with a legislative endorsement, for future consideration.

Legislators are quite too prone to think that when they have enacted laws for the creation and collection of revenue, for the collection of debts and the punishment of crime, and, perchance, performed the herculean task of electing a United States Senator, they have fully discharged their legislative duties. They forget that there are other equally, if not more important duties to perform, in providing the means for properly educating the adult industrial class of society. This is universally done in Europe, at least to an extent sufficient to provide competent directors for all the great industrial interests of the land. We have neither time nor space to say more under this head than what will be merely suggestive; but we hold that it is quite time our Legislators should take this matter under consideration, and initiate some steps toward an ultimate accomplishment of the end in view. The present "let alone" policy must inevitably continue to result in serious losses, both to individuals and the State, and we shall be fortunate indeed, if our chief industry is not thereby soon completely buried in the darkness of that empiricism in which it is already so sadly floundering.

## COPPER MINING.

A celebrated geologist says:—"Give me a good Copper Mine, and I will not ask for silver or gold." That geologist was a sensible man and knew when he had a "good thing." What proportion of the numerous copper mines, that are now being opened, in various portions of the State, will prove "good" or remunerative, it is impossible, at the present time to foretell; but enough has already been developed to prove that the copper mining interest must soon become of great importance to the State. There appears to be a belt of country, some eight or ten miles wide, rich in ores of copper, and extending along the middle portion of the foothills from the extreme Southern portion of the San Joaquin valley, as far North as Feather River. Another, and apparently extensive field, has been discovered, embracing a large portion of Del Norte and Klamath counties and extending thence into Oregon. In our issue of January 12th,



we gave some statistics showing the profits of mining for copper in veins which assay from 15 to 20 per cent., proving conclusively that such veins must soon become very valuable. Copper ore that will assay 20 per cent. is worth about \$120 per ton in New York. An advance of at least \$50 per ton can be obtained on all such ore in this city. A well defined copper mine, that will assay 22 per cent. and so located that its ores can be laid down in San Francisco, for \$15 per ton, is really worth as much as the richest gold and silver mine in Washoe—Gould & Curry and Ophir not excepted, provided the mine is capable of turning out the same amount of rock as the Washoe mines.

## GENERAL MINING STOCK REPORT.

REPORT OF SALES  
At the San Francisco Mining Stock Board,  
For the week ending February 14, 1893.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Ophir	16,800	12	\$300	2525	2525	2525	2000	2000	2000
Gould & Curry	4,800	4	500	3150	3200	3200	3175	3100	3175
Central	1,800	12	300	—	—	—	—	—	—
California	2,600	12	300	—	—	—	—	—	800
Chollar	5,600	4	500	560	—	530	540	525	550
Potosi	2,800	12	400	120	100	120	—	130	145
Hale & Norcross	8,000	8	100	500	500	510	625	640	560
Sierra Nevada	3,000	1	300	68	70	78	76	77	75
Danby	8,000	4	500	240	250	240	250	250	280
Burnham Moscow	4,800	2	100	65	60	60	60	60	60
North Petrol	2,000	1	300	27	—	20	25	28	25
Rogers, F. D.	3,000	1	250	7 1/2	8	—	8	9	—
Meredith	7,200	12	125	—	—	25	25	28	—
Charles Canby	1,800	1	30	46	60	57 1/2	53	57 1/2	58
Sacramento	1,800	1	500	55	42 1/2	—	50	50	50
Lucerne	1,500	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	1250	1250	1250	—	—	—
Iowa	—	—	—	—	—	—	—	—	115
El Dorado	—	—	—	28	—	—	—	—	47 1/2
Norton	1,600	1	—	10	25	27 1/2	28	29	28
Red Hill Tunnel	—	—	—	3 1/2	—	—	3	—	—
Mount Davidson	10,000	3	200	4 1/2	—	4 1/2	4 1/2	4 1/2	4 1/2
Wide West	2,600	4	80	35 1/2	300	325	330	330	325
Antelope	1,200	1	500	27 1/2	280	300	285	302 1/2	302
Esmeralda	1,600	1	1000	64	5 1/2	58	50	55	60
Real del Monte	4,400	1	400	34	31	32 1/2	32 1/2	33	35
Utah	1,200	1	100	8	8	10	13 1/2	10	12
Silver Hill	3,000	1	—	95	85	85	80	90	95

## Coso Stocks.

The Josephine changed hands at the Stock Board, on Monday, at 16 1/2, on Tuesday at 16, on Thursday at 22, on Friday 25; on Saturday at 26 1/2. Willow Springs was quoted on Monday at \$20, on Wednesday at 25, on Thursday at 22 1/2 and on Friday at 25. Coso changed hands on Thursday at \$10, on Friday at 13 and on Saturday at 16.

## Mexican Mines.

Mina Prieta sold on Friday for \$135, and on Saturday at the same figure. Dios Padre was quoted on Monday and Tuesday at \$40, and on Friday at 30.

SAN FRANCISCO, February 16th, 1893.

## STOCK REMARKS.

The Mining Market, for the week, has manifested a fair degree of activity notwithstanding the unfavorable condition of the weather much of the time. The disposition to operate in second and third class stocks, appears to be increasing. Esmeralda is also coming in for a fair share of attention among operators in this city. Our Stock Report from that district will be found full and reliable, and presents a very encouraging indication of the progress and value of the mines in that locality.

Ophir is without any material change. With some little fluctuations in the interim, the Stock Board closed the two last weeks with the same figures—\$3,600. The recent influx of water to that mine, has been overcome. It proceeded, as we intimated it possibly did, from a new vein of ore, which had been struck in the drift being driven westward. The ore is pronounced rich. If so, and the vein should prove, as is thought it may, to be the "Virginia," the late purchase of that Company's mine must prove of great advantage to the Ophir Company. Gould & Curry has been but little dealt in during the past week—the Stock however remains firm at last quotations. \$100 per foot is offered for the next dividend. It is rumored that this Company has withdrawn its ores from all outside mills, for what purpose is not known outside of the Directors.

Chollar has received a material check in its upward tendency, and has been subjected to great fluctuations during the week. Sales have been effected as low as \$350 and from that up to \$550 has been paid.

Potosi, at the close of the week, rallied from its low rates of the previous two days and now stands firm at \$20 advance.

The Charles Canby is still advancing, although wavering a little at the close of the week, notwithstanding the intelligence of the settlement of its suit with the Danby Co., by accepting 100 feet of the 180 feet in dispute. This piece of ground was known to be valuable, and the loss of 80 feet of good ground need cause no uneasiness to stockholders, especially as operations are in progress which will, in all probability, soon develop a large extent of the Company's ground always supposed to be valuable, but until recently thought to be out of reach, except by extraordinary expense. The present Superintendent of the mine is a man of energy and one thoroughly acquainted with his business.

Wide West shares have experienced further fluctuations. They opened at \$350, fell to 320, but rallied at the close of the week to \$335.

## TRANSACTIONS IN SHARES.

## NEVADA TERRITORY.

Burning Moscow—20 at \$65; 20 at 70; 26 at 65; 50 at 65; 130 at 65 @ 75.  
Burnside—20 at 22 1/2; 20 at 20; 10 at 25; 30 at 25; 108 at 18 @ 25.  
Chollar—20 at 360; 40 at 350; 45 at 510; 184 at 530 @ 610.  
Charles Canby—30 at \$50; 10 at 50; 180 at 55 @ 68.  
Danby—20 at \$255; 102 at 260 @ 300.  
Gould and Curry—8 at \$3,250.  
Hale & Norcross—75 at 550 @ 575.  
Iowa—20 at \$125.  
Hazel Green—200 at \$3.  
Meredith—80 at \$38; 20 at 32.  
Mount Davidson—32 at \$4 1/2; 50 at 4 1/2; 50 at 4 1/2; 128 at 4 1/2 @ 4 1/2.  
Norton—10 at \$28; 10 at 30; 100 at 28 @ 30.  
Ophir—60 at \$2 625; 12 at 2,000; 303 at 2,425 @ 2,050.  
Potosi—40 at \$110 seller 90 days; 40 at 125; 40 at 110; 20 at 110 @ 100.  
Potosi North—10 at \$28; 22 at 28; 168 at 28 @ 31.  
Rogers F. D.—\$7 1/2 @ 9 bid.  
Savage—5 at \$1,350; 3 at 1,300; 1 at 1,400.  
Sierra Nevada—10 at \$70; 20 at 75; 50 at 70; qtr 60 days 100 at 70 @ 78.  
Sacramento—10 at \$65; 62 at 45 @ 50.  
Chenango—100 at \$1 1/2.  
El Dorado—20 at \$50.  
Union Tunnel Mining Co. 25 at \$22 1/2.  
Union (Russ Dis.) 50 at \$3, 26 at 2 1/2.  
Union Gold and Silver Mining Co. 25 at 2 1/2 [325 at 3].

## ESMERALDA DISTRICT.

Antelope—7 at \$300; 5 at 300; 20 at 300; 4 at 305; 5 at 270; 215, 295 @ 305.  
Garibaldi—20 at \$80.  
Esmeralda—20 at \$62, 14 at 62; 20 at 62; 7 at 62; 10 at 62 1/2; 17 at 65; 3 at 64; 10 at 60; 15 at 55; 10 at 50; 203 at 55 @ 62.  
Real del Monte—10 at 35; 20 at 34; 50 at 31; 5 at 32; 5 at 33; 20 at 36; 12 at 35; 673 at 30 @ 36.  
Silver Hill—26 at \$33; 50 at 33; 20 at 32; 288 at 31 @ 34.  
Wide West—5 at \$352 1/2; 3 at 335; 4 at 332 1/2; 3 at 335; 192 at 320 @ 335.  
Utah—10 at \$97 1/2; 10 at 95; 20 at 90; 20 at 95 @ 100.  
Utah—50 at \$10.  
Hartford—30 at \$13.  
Coreso—100 at \$40.  
COSO STOCKS.  
Josephine—20 at \$20; 10 at 22 1/2; 60 at 22 1/2; 10 at 25; 31 at 25.  
Willow Springs—10 at \$25.  
Coso—3 at 15.  
COPPER STOCKS.  
Napoleon—50 at \$30; 50 at 34 @ 45.

## Stocks in Virginia City.

Corrected by WHITMAN & MITCHELL for the Virginia City Union.  
The following stocks, are in the market in Virginia City, and held at the prices annexed:

Ashland	9 00	American Basin	20 00
La Crosse	25 00	Hawkeye	20 00
Santa Fe	25 00	Consolidated Cedar Hill	4 00
Empire	5 00	Utah	40 00
Santa Rita	35 00	Industrial	5 00
McBoe	25 00	North American	5 00
Zouave	5 00	Philadelphia	2 00
Revidere	15 00	Sigel	2 00
York	4 00	Virginia	5 00
Governor Nye	7 00	Commercial	4 00
Battle	20 00	Ute San	3 00
Durham	—	Bloomfield	6 00
El Dorado	47 50	Cole	20 00
Summit	5 00	Golden Eagle	10 00
Washington Ledge	6 00	Decatur	5 00
Milton	100	Atchison	150 00
Cedar Hill Tunnel	5 00	Comet (Simpson's Park)	50 00
Hazel Green	25 00	Mohegan	6 00
Laboring	11 00	Golden Era	10 00
Sweezy	—	Oreoch	10 00
Caledonia	10 00	Madison	—
St. George	4 00	U. S. Tunnel	—
Mary Ann	25 00	Sacramento	—
Albatross	2 00	Harrison Co., Geller Ledge	4 00
Union Gold	25 00	Monarch	20 00
U. S. Mining Company	5 00	Irvine	15 00
Evening Star, (Argentine Dist)	30	Bald Eagle	2 00
Dayton Company	10	Oriental	—
Montrepy Co. (Spring Valley)	20	Union Mining Co.	13 00
		Empire Company (Spring Val)	25 00
		Baltimore American	25 00

## NEVADA COUNTRY STOCK REPORT.

[COMPILED FROM THE NEVADA DEMOCRAT.]

In consequence of the snow and late stormy weather, but little has been done the past week in the way of prospecting. When the snow has passed away, operations that have been temporarily suspended will be again resumed. There appears to be no abatement of the copper excitement, and new leads are constantly being discovered. An extensive copper lead running through Perrin's Ranch, on Wolf Creek, has lately been brought into notice. The lead has been taken up for a distance of 14,000 feet, and three different companies are now engaged in prospecting it. The leads are usually prospected by organizing a company of from twenty to sixty shares, and levying an assessment of from one to two dollars on each. Where the leads are so situated that they can be opened by sinking shafts or running tunnels, thus avoiding the expense of a steam pump, the cost of prospecting does not exceed one or two hundred dollars. Thus it can usually be ascertained whether the ore will pay for working, at a trifling expense. We hear of no sales worthy of note.

## GOLD QUARTZ MINING COMPANIES.

	Bid.	ASKED
Spenth & Clay, (per 100 feet)	\$25,000	50,000
Weeks & Co.	—	—
Nevada Quartz Mining Co. (1/4 interest)	12,000	—
Mattiny Company	300	—
Brickyard Company	50	100
COPPER COMPANIES.		
Tallman & Co.—Well Lead (100 feet)	2,000	—
Consolidated	200	—
Hagadori	100	—
Telegraph	200	—
Birdseye Gold, Silver and Copper Mining Company	—	—
Nevada G. S. & C. M. Co. (100 feet)	20	—
Champion (100 feet)	50	—

## ESMERALDA STOCK REPORT.

[CORRECTED WEEKLY.]

	Bid.	Ask'd		Bid.	Ask'd
Peru (two ft. to the share)	5	—	Union Tunnel	120	176
Garibaldi	40	27	Utah	—	—
Heath	10	15	East Essex Ex. Ural	—	—
Falls of Clyde	12	5	Peru	10	—
St. Louis	12	5	N. E. Enza	—	—
Hanover	12	25	Consolidated	1 1/2	—
Live Yankee	8	10	Chihuahua	20	25
Nevada	10	10	Arcado	6	10
Del Monte	37	—	Pacific	5	10
Pride of Antelope	5	5	Old Winnemucca	—	—
Utah	6	5	William Tell	—	2 1/2
Alturus	15	5	Ural proper	600	600
Fresno	9	15	General Jackson	13 1/2	14
Silver Hill	25	25	Fallstaff, Consolidation	4	5
Antelope	215	375	Atlantic	—	—
Wide West	365	375	Union Tunnel	20	—
Main Esmeralda	37	—	Rodeo Bluff Consolidation	17	20
Newton	50	—	Strawberry	20	—
Ural (Extension)	10	—	Fallstaff	4	4
General Hooker	10	—	Lazuli	5	10
Bamboo	100	—	Amador	—	5
Bright Star	15	—			

Esmeralda Stocks offered at San Francisco valuation:

	Bid	Ask'd		Bid	Ask'd
Antelope	215	—	Utah	120	—
Garibaldi	40	—	Real del Monte	27	—
Silver Hill	24	—	Bamboo	70	\$100
Utah	6	—	Ural	450	—
Wide West	365	—	Lord Byron	10	—
Main Esmeralda	37	—			

## TRANSACTIONS OF THE WEEK.

20 shares Ural sold at \$500.  
25 shares Strawberry sold at \$20.  
25 shares General Hooker sold at \$10.  
20 feet Peru sold at \$10.  
13 shares Heath sold at \$10.  
20 shares Brazil sold at \$5.  
25 shares Fresno sold at \$0.  
25 shares Bodie Bluff consolidation sold at \$17.  
75 feet Garibaldi lode, Hartford Co., sold at \$20.  
20 shares Bamboo sold at \$75.  
10 feet Bright Star sold at \$12.  
10 feet Bright Star sold at \$15.

The Examining Committee of the Esmeralda Stock Board, after a careful examination and average assay of the rock from the Ural Gold and Silver Mining Company, on Last Chance Hill, have recommended that ledge to be classed by the Board as among the No. 1 ledges. The assay reads as follows:—

Contains, in Gold per ton of 2000 pounds.....\$104 40  
Contains in Silver, per ton of ore.....169 30

Total yield per Ton.....\$173 70

## WASHOE STOCK REMARKS.

[COMPILED FROM THE DAILY TERRITORIAL ENTERPRISE.]

TUESDAY EVENING, February 13d.

There is rumor of a ledge being struck about six miles west of this place, which is said to be prospecting well in gold and silver. Steps have been taken by the first locators to develop their claims by sinking a shaft on their lead. Several extensions have already been taken up.

Some of the old locations in the Argentine District have lately been revived, and several new ones made. The past efforts of miners to develop the mines of this district have, without exception, proved failures. Present labors appear, we are informed, indicative of better results.

Several sales have taken place in Milton stock, at \$100 per foot. Sacramento is quiet; held at \$55 to 60 per foot. Ten feet of Birdall sold at \$23 per foot. Ten feet of Union sold at \$13 per foot. 25 feet of Sinaloa sold at \$7 1/2 per foot.

WEDNESDAY EVENING, February 14th.

Fifteen feet of Union Company changed hands at \$13; 20 feet Zouave at 5; 25 feet of Sinaloa at \$7 1/2; 15 feet of Pride of Washoe at 15.

THURSDAY EVENING, February 15th.

Several new prospecting operations have been commenced in the vicinity of Gold Hill, some of which bid fair to result profitably to those engaged. Late developments in this District appear to have inspired the miners with renewed confidence in the permanency and extensive range of these mines. 25 feet of Dunn sold, to-day, at \$3 per foot; 15 feet of Union sold at 13—this stock is in demand at 12. Four dollars is offered for Zouave. This company suspended operations on their claims several weeks since, which have not been resumed—hence the great depreciation of their stock in the market. Milton is offered at \$100 per foot—no sales. Sacramento is offered at 60 without sales. Fifteen dollars is offered for Pride of Washoe. Fifty dollars is offered for Buchanan.

FRIDAY EVENING, February 16th.

Some activity was manifested in stocks to-day, though but few sales effected. Some enquiry has been made for Sacramento; also for Shamrock. The Perseverence (late Kahoe) company have struck rock in their claims rich in both gold and silver. They expect to strike the ledge in a few days, at a point much deeper than where the rich specimens are found at present. Potosi is enquired for at current rates. Sales unimportant.

SATURDAY EVENING, February 17th.

Less activity appears in Stocks to-day than at any other time during the week. Few new stocks have been offered, and sales limited. The new discovery about six miles West of this place, mentioned under date of Tuesday last, and which caused considerable stir at the time, does not appear to amount to much.  
Two feet of Pride of Washoe sold at \$16 per foot; 19 feet Birdall at 20. A few other transactions have been made to-day, in outside stocks, at low rates.

NEW DISCOVERIES.—New discoveries have been made East of Humboldt, which, according to reports are marvellously rich. If they are anything like what is reported, we shall hear more from them soon. We are not given to sensation items and prefer to be a little behind time, rather than to give currency to unreliable reports.



**SUBSCRIBE.**—Are you a miner and not a subscriber to the **MINING AND SCIENTIFIC PRESS**? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the **PRESS**, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the **MINING AND SCIENTIFIC PRESS**. We invite all to send us their names and *four dollars, or two dollars* for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the **PRESS** for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

#### SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the **MINING AND SCIENTIFIC PRESS PATENT AGENCY**. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

#### Our Mint, its Rules, Charges and Operations.

For parting silver from gold when gold is below 300-1000ths. fine. . . . . 3cts per oz.  
" from 300-1000ths. to 750-1000ths fine. 7cts "  
" " 750-1000ths to 950-1000ths " .14cts "  
DEPOSITS SILVER BULLION—PURCHASES.  
\$1.21 per standard ounce ½ per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300, 3cts. per oz. gross weight  
301 " 500, 7cts. " " "

#### DEPOSITS FOR FINE BARS.

\$1 16-4-11ths cents. per standard ounce, ½ per ct. gross value of silver for making bars; also when gold is contained ½ per ct. on gross value of gold for coining. Refining charges as in purchases.

#### BARs SOLD FROM REFINERY.

\$1 21cts. per standard oz. ½ per ct. gross value to be added for making bars.

#### DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz. ½ per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

#### DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz. ½ per ct. gross value of deposit for making bars.

#### CORNS AND BUNIONS REMOVED.

DR. BYRON C. KENNEDY, practical CHIROPODIST, late of Philadelphia, would most respectfully inform the citizens of San Francisco that he has opened his office at No. 12 Montgomery street, opposite the Lick House, where he is prepared to remove all excrescences, such as Corns, Bunions, Inverted Nails, Enlarged Joints, Swelled Insteps, Frosted Feet, Chilblains, Callosities, and all diseases of the Feet, without pain or inconvenience to the patient.

Dr. Kennedy also attends to Ganglion, or Scorbatic Ulcers, and all other diseases of the Skin. He may be consulted at his office, No. 12 Montgomery street, opposite the Lick House, from 9 to 12 A. M., and 2 to 6 P. M. Having devoted six years of study to this important, but too much neglected, branch of human knowledge, and having studied anatomy under the most skilful and scientific Professors of Philadelphia, and having made this branch of surgical science his speciality for nine years, enables me to operate skilfully and successfully. In England, France and Austria the highest prizes are often awarded to practitioners in this branch of surgical science, and it occupies with others an equally lofty position in the profession.

Voizin is an illustrious example, a shining light, among the philosophical stars of Europe, and Dr. Byron C. Kennedy has fully equaled him in this country, as a proof of which the Faculty of the University College of Philadelphia, Pa., complimented him with testimonials.

Dr. Kennedy has bent his earnest attention to the cure of these diseases, in which he has become so great an expert that he is now regarded as the leader in this country, in this branch of the profession, throughout the United States.

The following letter, which emphatically speaks for itself, was written by Dr. W. L. Stevens of the University College of Philadelphia:

DR. BYRON C. KENNEDY: Dear Sir—Learning that you are going to take your departure for California, and wishing to inform the citizens of Philadelphia and also the people of the State of California the esteem in which we hold you, and knowing that nothing is more essential to your success than the encouragement which you may receive from the people of Philadelphia, in the midst of which is the playground of your boyhood, and knowing that you have devoted years of study to this important but too much neglected branch of human knowledge; that you have attained to the highest rank in your profession, several of the Faculty and other prominent citizens of Philadelphia having submitted to your manipulation, we can recommend you with confidence to the citizens of San Francisco, as one of the most skilful surgeons of the age, and we hope your success may be such as will repay you for your years of study, and that you may find a broad field for your exertions in the new and growing city of the Pacific.

#### THE EYES! THE EYES!! THE EYES!!!

DR. E. H. PARDEE,

Oculist and Aurist to the San Francisco Deaf, Dumb and Blind Asylum.

After a protracted blindness of more than five years, Dr. PARDEE has made himself thoroughly and scientifically acquainted with all diseases of the Eye, and is now practicing with a success that cannot be surpassed in the United States; and as proof of this he substantiates by many cases now in California that have been cured by him, after having exhausted the skill of the eminent physicians and oculists of New York city, Boston and Philadelphia.

From an extensive practical knowledge of more than 14 years, Dr. Pardee asserts, and is prepared to prove, that there has been more blindness from bad and improper treatment than from disease itself—how can it be otherwise when we take into consideration the effects of the old hackneyed course of local treatment that patients undergo—Caustic to-day and Bluestone to-morrow—more painful than death, and always more tedious than the disease. Patients are daily presenting themselves with chronic cases, and on inquiring what had been formerly done, the almost invariable reply is, "I had my eyes burned with caustic or bluestone;" "I was bled and blistered, then cupped two or three times a week—had a blue pill prescribed for me at night, and salts in the morning—was ordered in a dark room—to keep my eyes tightly bandaged—to avoid the open air and exercise," with fifty other inconsistencies, the aggregate of which is sure blindness. Patients should be careful and not place their eyes at the mercies of a man who does nothing but burn them daily, not investigating the circumstances of each particular case, but ignorantly and blindly adopting and following theories the most erroneous, and destructive to the eye.

How much more rational and consistent to consult an experienced Oculist, who thoroughly understands every disease of this tender organ in all its aspects and varieties. Dr. PARDEE has from sixty to one hundred patients under his daily supervision, and with but very few cases, they have all been treated by other physicians before applying to him—and all to no benefit. Those who are doubtful are permitted to call at Dr. Pardee's office and confer with the many patients who converse there between the hours of 9 and 12 in the forenoon. The Dr. has a large and only assortment of Artificial Eyes on this coast, inserted, having all the movements of the real eye, and that they look so life-like that no one can tell them, when properly inserted, from the real eye. These eyes are sold reasonably.

All the operations performed, such as "Strabismus," or cross-eyes—"Cataracts"—or removal of the Lens by absorption or extraction—"Pterygium," or fleshy membranes growing over the eyes. Artificial Pupils, &c.

OFFICE—Clay street, above the Plaza—opposite Plaza Hotel—old No. 217, up stairs. aug14.

Dr. Van Zandt,  
Consulting Physician and Surgeon,  
OFFICE:  
Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity Made Subservient for the Cure of all Nervous and Spinal Diseases

THAT THIS PRINCIPLE, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanting by physicians to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

#### Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

#### Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

#### No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRICAL excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

#### To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct views of the origin of all their maladies. Ladies can consult him with entire confidence, as he is no speculator upon human ills—but is proving himself the only member of the legitimate profession in California who is really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately attuned nervous organism, together with their great sympathetic life, renders him doubly able to assuage those silent complainings which they bear so patiently and so long. No social disquietude need longer afflict our home circles; for he can arouse the stricken energies; restore the wretched tonicity of the body; awaken the melancholic and desponding; arrest those drains which cause so much anxiety; cure those protean maladies which have so long

#### Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength; extreme debility and listlessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exciting the Electro Galvanic current, together with his remedial measures which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore you to usefulness, and spare you a blessing to your family and to society.

#### All the World Over

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is as necessary to restore the ELECTRO-GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and verified by hundreds of patients; so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unsalable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, mental and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or caecetic habit of body.

#### None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—depression of spirits which weigh you down—weakness that knows no sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you a radical removal of all bodily and mental infirmities, within the scope of science and man to remove.

#### The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made these afflictions an especial study, and that he is the only Surgeon on our State, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataract, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov29—3m

C. W. THOMAS, Plaining Mill, California street, facing the Mission R. 1 ml  
Depot, San Francisco.

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts. ml

D. R. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner. ap16

KELLY & WADE, Importers and Dealers in Paints, Oils, Turpentine, Etc. Nos. 105 & 107 California street, Bet. Davis and Front. mj

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T. mj23

PALMER, HANSCOM & Co. Golden State Foundry, and Machine Work (Formerly Satter Iron Works.) First street near Market. mj23

ORO HOTEL, Fire-Proof Brick Building, No. 49 K street, Bet. Second and Third, Sacramento City, Jas. Smith, Proprietor. mj30

S. ROSENBAUM & Co.—Importers of pure Havana Cigars, Tobacco, etc., corner Clay and Battery, 26 and 27 Cedar street, New York.



## LOWER CALIFORNIA

## Colonization and Mining Company.

THE AGENTS SENT TO MEXICO BY the above Company having returned per steamer Regon, after having secured a tract of upwards of

**125,000 Acres**  
OF RICH AGRICULTURAL LAND,  
and a valuable silver Mine,

The Company is now prepared to furnish exact information to Colonists who have already engaged, or those about to engage in this

## SPLENDID ENTERPRISE.

It proposes to send a vessel about the first of March next, and there being but a limited number of shares

NO TIME SHOULD BE LOST BY COLONISTS.

Farmers Miners and Mechanics,

With families are particularly invited by the authorities of the Territory. The land selected, in point of fertility of soil, is not excelled on the Continent. The climate is unsurpassed in the world. The richest Silver Mines known to exist in the Territory are in the immediate vicinity and bordering on the agricultural lands of the Colony.

N. B. Bear in mind that a share costs, at present, only \$200, which entitles the holder to free transportation for self, family, and articles of personal use and an equal share in the land, the Company's Silver Mine, etc. the whole enterprise, being for the mutual benefit of members only.

Full information can be had, and Mineral and Cotton Specimens seen, by applying at the Office of the Company, North-west corner of Clay and Front Street.

## BOARD OF TRUSTEES.

A. G. RANDALL, President.

Capt. JOHN H. BELLI, V. President.

O. F. GEHRICKE, Secretary.

Trustees.—L. F. LOVELAND, Isaac FAVOR, M. D. MATH-  
EWSON, H. C. PATRICK, I. ROWELL, M. D.  
Committee on Survey.—E. RICHARDS, Special Agent;  
Capt. R. C. ANDREWS, Surveyor.

**RASCHE & SONS,**  
131 Montgomery st., bet. Bush & Sutter,  
SAN FRANCISCO.

WHOLESALE AND RETAIL DEALERS IN

**Pianos, Sheet Music**  
ITALIAN STRINGS,

And Instruments of all kinds. Also,

Sole agents for the celebrated manufacturers,

**A. A. GALE & CO., New York;**  
**C. MEYER, Philadelphia.**  
**T. GILBERT, Boston;**

Whose Pianos they have always on hand, for sale or rent

## PIANOS FOR RENT.

New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the Trade and to Professors of Music.

## WASHOE

## Stock Exchange,

N. E. cor. Montgomery & Merchant sts.  
SAN FRANCISCO.

L. W. NEWELL & CO.,

Buy and sell Washoe, Esmeralda and other Mining  
Stocks and Securities.

DEVOR & COS.,

**STEAM ENGINE**

—AND—

**MACHINE WORKS,**

Corner Market & Fremont streets,

ALL KINDS OF MACHINERY, SUCH AS STEAM EN-  
GINES, SAW MILLS, Irons, Flour Mills, Quartz Mills  
etc., etc., made to order and repaired.

Also,

BLACKSMITHING, TURNING, FINISHING, PLANING,  
AND SCREW-BOLT Cutting  
AGRICULTURAL MACHINERY made and repaired,  
Duplicate parts of **Threshing and Reaping**  
**Machines and Threshing Teeth** made to order,  
on the most reasonable terms.

**Steam Engines and Boilers** constantly on  
hand, and for sale cheap. Screw-Cutting and Turning  
Lathes for sale.  
DEVOR & CO.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency. The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,

No. 10 Naglee's Building.

Lithographic Maps can be seen and had at the above named office. no 13 6mo

## A. ROMAN &amp; Co.,

WHOLESALE AND RETAIL

**Book Establishment,**  
417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigot on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Philips.

Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell.

Iron Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufacturers and Mines.

Weissbach's Mechanics of Machinery and Engineering

Naville's Hydraulic Formula Tables.

Freeze's Chemical Analysis.

Together with many other works in this and similar lines

Books imported to order on short notice.

A. ROMAN & Co.

417 & 419 Montgomery Street.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.

## THEN THIS!

## Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

## Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

## Gird's Budding Knife.

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentes,) San Francisco.

sept-3m

## The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities.

The spacious READING AND EXCHANGEROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

## News Stand,

AND A LARGE

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

San Francisco, Jan. 1st, 1863.

Proprietors. tf

## MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments & Musical Merchandise

SHEET MUSIC & MUSICAL BOOKS.

GENUINE ROMAN STRINGS, &c.,

Light's New Patent Insulated Iron Frame is put into all of

LIGHTS & BRADBURY'S OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

MELODEONS AND HARMONIUMS,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN,

Warranted superior to all others.

Send for a catalogue and Price list.

oct

A. KOHLER, Agent.

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as Mining Superintendent in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assorter of Copper Ore. He can give ample testimonials as to his capacity for the position he seeks.

Apply at this Office.

## PHILADELPHIA BREWERY,

Second St. corner of Folsom, SAN FRANCISCO

Holscher, & Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

Nov 9

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABMET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Guns, Hoops and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL sizes. Manufacturers of "Garrett's Patent Improved Journal Metal."

F. G. BEPLER,

Practical Coppersmith

No. 118 (Old No. 22) Bush street,

Between Sansome and Battery, SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work. All orders from the country promptly attended to.

## FREDERICK KESMODEL,

Cutler & Surgical Instrument Maker,

817 KEARNY STREET,

Between Jackson and Washington streets,  
SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupure, or any one interested, is called to his new method of fitting and adapting Trusses to the different case. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horn, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves. FREDERICK KESMODEL, Inventor and Patentee

ap8 tf

## LABOR-SAVING

## Rock Drilling Machine,

TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE and Quarrymen. The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

## HAND, HORSE, AND STEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc. one man performing the labor of three in the ordinary way.

A FOUR-HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory references will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process. Address orders to

WM. W. DUNN,  
Fremont street, bet. Market and Mission, San Francisco.

## LATEST IMPROVEMENT

## in Ladies' Buckles.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERICK REICHEL, Manufacturing Jeweler,  
620 Merchant street, San Francisco.

## REMOVAL.

OFFICE OF THE PACIFIC METAL-urgical Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
318 California street, near Sansome, up stairs.

## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 311 Market street, Opposite Battery, San Francisco.

## FULTON FOUNDRY &amp; IRON WORKS

## HINCKLEY &amp; CO.,

MANUFACTURERS OF STEAM ENGINES,

Quartz, Flour and Saw Mills; Cast iron Fronts for Buildings, Mining Pumps, and all kinds of Machinery Amalgamators, Etc.

Nos. 47 & 49 First Street,

Between Market and Mission, San Francisco.

ALL kinds of Iron and Brass Castings furnished at short notice. Every style of finishing to Iron when cast. Repairing to Machinery neatly done. Pattern Making in its various forms.

D. B. Hinckley, Wm. E. Worth. Wm. A. Field



**OFFICE OF OPHIR SILVER MINING CO.,** San Francisco, Feb. 6th 1863.—A dividend on the capital stock of this Company has been declared, payable on and after the 9th inst. The transfer books will be closed from this date until the 9th inst.

feb6 N. K. MASTEN, Secretary pro tem.

## P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

### FOR PANAMA.

The following Steamships will be dispatched in the month of February, 1863.

**February 1st, Steamer Sonora.**  
 " 11th " **Constitution.**  
 " 21st " **St. Louis.**

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

**A. B. FORBES, Agent.**

Feb 4 Corner of Sacramento and Leidesdorff sts.

## TO THE CLOCK TRADE.

WE HAVE RECEIVED, EX RECENT FLEET OF CLIP-PERS, a fine assortment of the

**NEW HAVEN COMPANY'S,**

(FORMERLY JEROME)

## CLOCKS,

Comprising all the Desirable Styles. [Also a Large Lot of

**Fancy Time Pieces**

OF NEW AND BEAUTIFUL PATTERNS.

We shall in future be in receipt of sufficient quantities of the above goods to supply our largely increased trade.

**HAYNES & LAWTON, Agents N. H. Clock Co.**  
 Nos. 616 and 518 Sansome st., cor. Merchant,  
 Jan 26 1863 San Francisco.

## SQUARZA'S PUNCH.

### FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

### ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

**No. 44 Leidesdorff street,**

Opposite the What Cheer House, San Francisco.

## V. SQUARZA'S Punch Factory.

**MR. SQUARZA IS FAVORABLY** known in this State for his Anti-Divorce Liqueur and similar productions, as manufactured by him. We may mention that Mr. Squarza is an fait in the chemico-distilling science, hence the celebrity of his articles. He has two establishments for the sale of his famous Punch—one on Leidesdorff, the other on Montgomery street—which are constantly thronged with our bon vivants.

The following is a list of his liquors, all of which we have tasted, and find them the most delicious and harmless beverages in this city, being pure, and unadulterated with drugs or other injurious chemicals:

Rum Punch,	Strawberry Punch,
Cognac do.	Whisky do.
Arac do.	Kirschwasser do.
Anti-Divorce Punch,	Cocoa
Coffee do.	Morning Comfort,
Tea do.	Kuennel.
Pineapple do.	Brandy Cocktail,
Anisette,	Anti-Hyspersia Bitters,
Kirschwasser,	Ladies' Tears.
Appetizer,	

And CHAMPAGNES of all brands.

## PEOPLE'S

## Steamship Line!

CONNECTING

**CALIFORNIA AND NEW YORK,  
VIA NICARAGUA.**

**750 Miles Shorter than any other Route!**

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**

**E. HOWES** ..... COMMANDER,

Will be dispatched for

**San Juan del Sur,**

From Mission street Wharf,

Punctually at 9 o'clock, A. M., on

**WEDNESDAY, - - - MARCH 11. 1863.**  
 Connecting at GREYTOWN with the Splendid Steamship  
**ILLINOIS**.....3500 Tons.

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to

**I. K. ROBERTS, Agent,**  
 No. 407 Washington Street, opp. Post Office.

## DONAHUE'S

**Union Iron and Brass Foundry,**

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

**The First Established in the State.**

**MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices.** Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.

PETER DONAHUE.

## LEWIS COFFEY AND RISDON,

**STEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.  
 Opposite Oriental Hotel, San Francisco, Cal.  
**LEWIS COFFEY J. N. RISDON.**

## GREAT REDUCTION

IN PRICES.

## STANFORD BROTHERS,

**121, 123 and 125 California Street,**

*Keep the Largest Stock of all Kinds of*

## Lamp Stock

**And will Sell Cheaper than any other House in this State**

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

ap16tf

## TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

**THE SIMPLE, COMPACT, STRONG AND**

effective manner in which it is applied to any height of

fall, (3 feet to 300), and to any kind of machinery, will

Save in Transportation Material and Labor, from

25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address

**J. M. BETH.**

Miners' Foundry, San Francisco.

**23.** This Wheel is fully GUARANTEED. Jan 19-1863

## Holiday Presents!

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

## BRAVERMAN & LEVY'S,

**621 Washington Street,**

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

**JEWELRY AND SILVER WARE,**

Of the latest and Most Fashionable styles, which we have received by the last Steamer. ALSO,

**FRENCH CLOCKS,**

AND

**PRECIOUS STONES,**

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

**BRAVERMAN & LEVY,**

No. 621 Washington Street,

Facing Maguire's Opera House.

Dec 29 1862

## LEANDER RANSOM,

**Civil Engineer**

AND

## SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

## STATE LOCATING AGENT.

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL LANDS,**

**At the low price of \$1.25 per Acre.**

Terms.—Twenty per cent in cash and the balance on a credit of several years.  
 OFFICE: Second floor of Express Building, N.E. corner of Montgomery and California streets. oct-3m

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

**WETHERED & TIFFANY,**

Office, 410 Montgomery street.

**CHARLES R. BOND, (Late City and County Assessor.)**

## REAL ESTATE AGENT,

**No. 410 Montgomery street, San Francisco.**

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## For Sale Cheap!

**A HORIZONTAL STEAM ENGINE OF** 4-Horse Power, Flue Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

**JULIUS SILVERSMITH,**  
 Federal Building, cor. Battery and Washington Sts  
 Room, No. 23.

## DEETKEN'S

**Chemical and Metallurgical Works,**

On San Bruno Road, Islais Creek,  
 SAN FRANCISCO.

**CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON.** ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS. **\$25** Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for her purpose. nov8-3m

## SQUARZA'S PUNCH.

**HOME MANUFACTORY.**

WHOLESALE AND RETAIL,

**No. 44 Leidesdorff St., near Sacramento.**  
 Branch at 408 Montgomery street. my30

## JULIUS SILVERSMITH,

**Commissioner for Nevada Territory,**

**OFFICE, IN LATE STATE CAPITOL,**

Corner of Battery & Washington streets.  
 Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

## JAMES PHELAN,

(LATE J. & M. PHELAN.)

**IMPORTER AND JOBBER,**

**Wines, Liquors, Etc., Etc.,**

**Nos. 616 & 618 Front street,**

Between Jackson and Pacific Streets,  
 Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
 TERMS LIBERAL. Jan. 1-1863

## THEODOR KALLENBERG,

**Maker of Models**

**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps.** Repairing of Machinery promptly attended to.  
**No. 4 Sansome street, corner Market,**  
 aug.31m San Francisco.

## PALMER, HANSCOMB & CO.,

**GOLDEN STATE FOUNDRY**

**AND MACHINE WORKS.**

**First Street, near Market, San Francisco,**

**RESPECTFULLY SOLICITS ORDERS for all kinds of R MACHINERY, for Mining and other purposes** Please send Plans and Specifications.

Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast.  
 San Francisco, November 29, 1862. 3m

## 50 lbs. MARINE AND

## Fire-Proof Paint,

**MANUFACTURED BY THE PACIFIC METALLURGICAL** Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
 For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

### 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

### DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. Fouque, Superintendent.  
**WORKS, North Beach; Office, 318 California st., San Francisco.**



# Mining and Scientific Press.

A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, MONDAY, FEBRUARY 23, 1863.

NO. 17.

## RANKIN'S IMPROVED SCHOOL DESK.

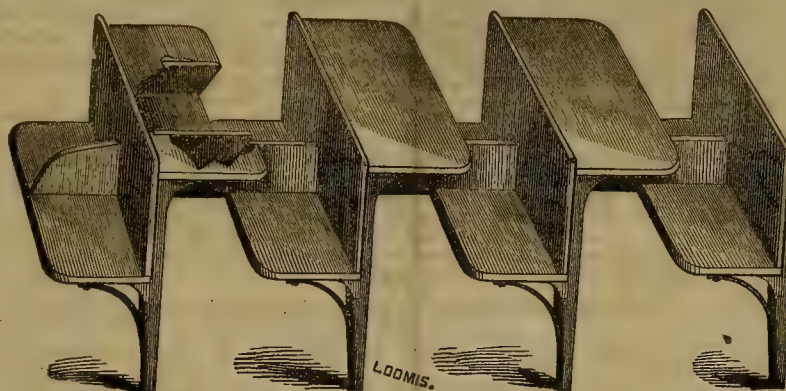
By the arrangement represented in the accompanying cut, two or more School Desks are connected by a longitudinal beam or board, and firmly held together. The following advantages are claimed for this arrangement:

1. The series of Desks thus formed stand very firm on the floor, without being in any manner fastened to it.
  2. They can be removed at pleasure by adults, in a few minutes, with little or no expense.
  3. They present fewer obstacles to the use of the broom than any desk in use.
  4. They furnish much less occasion for noise than other school desks, by presenting less surface for the feet to strike against.
  5. They are superior also to other Desks, in regard to the convenience of getting in and out of them with ease.
  6. The arrangement of the book-shelf, (as seen in the front desk in the cut, where the writing board is broken away) by which a separate place is provided for the slate and atlas, and less room allowed for miscellaneous articles, has been found by experience to be a great convenience. It saves noise and promotes neatness.
  7. In appearance they are neat and when properly made, even elegant.
  8. The central longitudinal beam separates the two scholars in each desk, thus giving to the arrangement one of the principal advantages claimed for single desks.
  9. They are simple in construction, and easily made "at home" by any good workman; put together with screws, can be taken apart and boxed.
  10. They can be more easily adapted to particular tastes and circumstances, as regards height of seat and writing board, inclination of the seat and back, etc., than any that are supported by castings.
  11. They are in general firmer and more durable than desks that require to be fastened to the floor by screws or nails.
  12. They are much cheaper than any other good desk—costing, ordinarily, not more than one half as much.
- That these statements are true, must be apparent to teachers and others who have had much experience in using and furnishing school rooms; and if they are true, it is equally plain that the advantages obtained by this arrangement are very great, and that it has good claims to the notice and favor of all who may desire to assist in improving the appearance of our school rooms, and promoting the comfort of pupils and teachers.

The desks, or the right to use this invention, will be furnished on very favorable terms on application to

WARREN HOLT,  
305 Montgomery street, San Francisco.

**LARGE CAPITAL.**—The Great Western Railway (England) is about amalgamating with two other companies, when the whole capital will be \$210,000,000.



NEW AND IMPROVED SCHOOL DESK.

PATENTED FEBRUARY 18, 1862, BY J. S. RANKIN.

## NOTES ON THE COPPER MINES OF AMADOR COUNTY.

There are three distinct veins running through this section of the country. The first is about three miles from Ione City, in the direction of Jackson, running in a Northernly and Southernly direction. According to reports these veins or ledges as they are called, continue their course from Copperopolis through Campo Seco and down to Clarksville in El Dorado. Some time ago I visited the two last celebrated mining camps. But my knowledge of the geology of the country, would scarcely allow me to come to the conclusion that in Amador County they have the exact ledges that are running through Calaveras County. But of this I am certain, that along the whole of this distance, the ground is taken up for copper mining, and in many places a very considerable amount of work has been done. But very few, however, have been so successful as to strike the copper-bearing rock; still they have strong faith that they will soon do so, and no amount of dollars would induce them to give up their claims.

The first mining camp that I visited was that of Dr. Newton. He has out at his mine about 100 tons of fine ore. On this claim considerable amount of work has already been done; they have sunk down until they have arrived to the depth of about 170 feet. At the depth of about 90 feet they were so fortunate as to strike the copper-bearing lode, which was twelve inches in width, and down along the whole depth they have had moderately good ore. Sometimes the lode would seem a little less, but in a little while it would again swell out to eighteen or twenty inches. On descending the shaft I observed that in some places it had a width of two feet six inches. At the bottom of the shaft they have now two feet nine inches on one side and two feet on the other, of moderately good shipping ore. It will be observed from the above that this company have got a lode of copper for the depth of about eighty feet. Rather than give an opinion of the value of the above mine I let it speak for itself. It is evident that this mine is capable of being worked on a very extensive scale, if properly managed. I

trust that they will sink deeper, so that it may become known whether we have our lodes running deep or not in that section of the State.

To the South of this claim, ground has been taken up in the name of the Oak Hill Mining Company. They are sinking a shaft here at a distance of about 500 feet from Dr. Newton's shaft, but as yet they have not struck any copper indications.

In the immediate neighborhood of this last mine there are two others sinking down upon the same indications. They are named Rutledge, and Doty claims. The first shaft is the best workmanship that I saw in this camp. The Doty boys are working in very hard ground, but now and then the mundic contains specimens of copper pyrites that would assay some

10 or 12 per cent. of copper.

Having heard some time ago that there was considerable excitement toward Jackson, I resolved to visit this place; but I could not find that any rock presented to me contained any indications of a copper lode. I was told that the whole belt of the country was taken up for five miles, for copper. I was on some of the ground, but did not see anything attracting to my eye.

The next district I visited was the one known as the "Horse Creek" district. There they have sunk about forty feet. The indications which induced them to strike here were some green carbonate and silicate of copper cropping out. They have met with but very little success as yet. In one or two places, while sinking, they came upon some boulders of quartz, containing bunches of copper pyrites.

I visited two more copper claims still in a southernly direction. They are respectively called the Reed Mining Co. and the Boulder Hill Mining Co.

On the other vein, called the Hornblend lead, about half a mile in the direction of Jackson, there are several claims taken up; but very few with any success. In one instance they say they have the sure thing, having struck good indications of a silver lode, the rock giving, they protest, all the acid tests of silver, viz.: dissolving in nitric acid, decanting the clear liquid—a copious white precipitate was formed, which precipitate was the tetroxide of antimony and not chloride of silver. I found that several parties had fallen into the same error. Some time, Mr. Edrorn, in a future number, I will give you a few hints on the fallacy of the chloride of sodium put for silver.

The Randall is another claim which also promises to be a good mine. They have sunk here some twenty or forty feet and are now on a thick vein of mundic, containing considerable sulphurets of antimony and copper. Some of the specimens I took up would assay about four or five per cent. in copper. They have to fight hard with the water at the bottom.

From here I went some miles in the direction of the Cosumnes River. I came to a Ranch called Stanley's Ranch. Here a fair company had been organized and had taken up



some 2,000 feet upon a ledge. The outcroppings on this lead bring heavy masses of hydrated peroxide of iron containing small quantities of the green carbonate of copper. Several claims had been taken up upon this lead—both in a northerly and southerly direction. I visited two of the northerly extensions, called Groat & Walker Claim, and the Cossumnes River Claim. Both of these claims promise to turn out well. I saw some very rich specimens of the red oxide of copper and also some silicate of copper, reported to have been obtained from a claim on the extension of the Cossumnes River claim. There must have been considerable quantities of it, since wherever I would go, nearly all the way from this place to Sacramento, I found specimens of the same kind, all being reported as brought from the above mine.

There is also considerable excitement about copper ore in the neighborhood of Rich Bar. The copper here is the sulphuret very much mixed with quartz. The ore is of a very fine quality, but of very little value, as it is too much mixed with gangue—probably the ore may concentrate as they sink down. About six miles from this place is a town called Puckerville. Claims have been taken up here, also on Gregg's Ranch. On one claim they have sunk down about six feet and have struck a very strong vein of mundic; but the mundic does not contain the smallest piece of copper.

Thus ended my visit to the Amador copper mines.

If you travel along the hills, wherever you see a rock you will also find a notice that it is claimed as copper ground. Should *two per cent.* of the taken up claims prove to contain copper in working quantity, Amador will soon become one of the richest copper mining countries in the world.

#### IMPROVED SCHOOL DESKS.

We would call attention to the representation, on our first page, of an improved School Desk, recently patented by J. S. BARKIN. The enumeration of its advantages, given in immediate connection with the illustration, fully sets forth its superiority over any other description of Desks in use. We have also seen testimonials of its great utility, signed by all the leading School Officials and Teachers in this city; also from the numerous prominent Teachers and others engaged in Educational interests in the Eastern States, where this Desk is being very generally introduced. County School Superintendents and School Trustees throughout the State should give this new School Desk a careful consideration. Its advantages in every point of view must be apparent to every one who will carefully examine it. Rights to construct the same can be obtained on reasonable terms by addressing WARREN HOLT, No. 305, Montgomery Street, San Francisco.

THE "Notes on the Copper Mines of Amador County," which will be found upon our first page, were prepared by one of the most thoroughly practical Mineralogists in the State. We have the promise of further communications from the same gentleman—Notes upon other Copper Mines, and some practical articles on assaying and ore tests, which will be found, very valuable to the miner, and prospector.

CLASS IN CHEMISTRY AND ASSAYING.—By reference to a card in our advertising columns, it will be noticed that a gentleman of this city proposes to open a class for instruction in Chemistry and Assaying. The gentleman is a man most eminently qualified for taking charge of such a class, having had long experience as a practical Assayer and Chemist.

A rare opportunity is here presented for persons engaged in or contemplating any connection with mining enterprises to acquaint themselves thoroughly with a knowledge of minerals and their resulting metals.

MAP OF SINALOA.—We have received from Henry Payot No. Washington Street, a finely executed Map of Sinaloa, Mexico. Sinaloa is located immediately below the State of Sonora, its Western boundary resting upon the Gulf of California and its Eastern extending just beyond the Coast Range of Mountains, some 35 or 40 miles inland. These mountains are highly metaliferous, and contain a great number of abandoned Mines which are now being reopened with great encouragement of future success. Parties interested in that section, or desirous to become acquainted with it, should provide themselves with a copy of this valuable Map.

#### MINING EDUCATION.

In the leading article of our issue of the 9th inst. we introduced an extract from a paper communicated to the CALIFORNIA MINING JOURNAL, some three years since, and entitled "The Advantages of an Extended Knowledge of Mineralogy to the California Miner," by M. Attwood, Esq., of Grass Valley, wherein the writer expressed his belief, founded upon scientific data, that important discoveries in other metals than gold, would soon be made on this Coast. The discovery of silver, soon afterward, on the Eastern Slope, and subsequently in various portions of this State, added to the still more recent, and wonderful discoveries of copper, have most remarkably verified the correctness of his prediction, and afforded additional evidence of the value of science in the mines. Since the issue aforesaid our attention has been called to a communication in the Sacramento Union, under date of Nov. 2, 1859, in which the writer quotes a portion of a private letter written by Mr. Attwood, a short time previous, giving the result of his observations while on a visit to the Ophir Mine. We give the extract:—

I did not make as careful and close an examination of the ground above the vein as I could have wished; indeed, from the confusion existing, and from one formation passing into another, to work out the geology properly would require time. The course of the vein appears to be a few degrees west of magnetic north, dipping westward at an angle of about forty-eight degrees, *but the dip being a false one, you may not sink far before it will change.* To the westward of the vein, and at no great distance, is a large 'dike vein,' (the upper quartz ledge I mentioned in my correspondence) [now known as the "Virginia Ledge"—Ed. Press] the direction of which is parallel with your vein, but the inclination or dip, contrary, or to the eastward, so that your vein might continue its present dip westward till intersected by the Dyke vein. The formation adjacent to the vein is a partially decomposed felspathic porphyry.

Mr. Attwood is a mining engineer and mineralogist, and thoroughly acquainted with every department of mining engineering. His knowledge in this department of science enabled him to again predict the existence of a fact in regard to the Ophir mine, buried several hundred feet beneath the deepest opening at that time made, and one directly contrary to every surrounding indication when considered by an unscientific mind. Without any hesitation, he wrote at a time when the mine had only been opened to a depth of about 15 feet: "The dip [of the vein] being a false one, *you may not sink far before it will change.*" Since that date, upward of three years have passed away and the workmen in the Ophir mine have gone down to the depth of 210 feet and demonstrated the exact truth of what the application of science to an undeveloped mine had foretold. It is now known that the Ophir mine which dipped at the surface about 48 degrees to the West, has in less than 200 feet changed its dip to about 60 degrees East. In other words its present dip at the lowest point reached is nearly at right angles with its dip at the surface. This change in the angle of the dip has caused the extraordinary dilated appearance of the vein in the middle and lower galleries.

Had the Ophir Company at the outset of their work determined to sink a shaft, say 500 feet deep through which to work their mine, and employed a man not thoroughly skilled as a mining Engineer, to locate the same, he would most undoubtedly have been governed by surface indications and located the shaft at a point, from which at the required depth of 500 feet he would have found himself several hundred feet distant from the vein after arriving at the point where he expected to intersect it, and constantly increasing that distance as he progressed downward. Thousands of dollars are annually thrown away by the miners of California from the lack of proper engineering knowledge in this very matter of locating shafts and tunnels. Millions of dollars have been thus uselessly expended in the English mines, and it was not until quite recently, and after the most earnest appeals of scientific men to mining adventurers in that country, and a presentation of the convincing facts of enormous losses proven to have arisen from a lack of proper mining knowledge, that the adventurers could be induced to employ competent and properly educated men as mining engineers. As late as 1836, \$50,000 was expended in sinking a single shaft for coal, near Northampton, at a point where even the most superficial knowledge of the dip of the strata, would have proved the impossibility of success. The first shaft

sunk at the Haswell colliery by inexperienced adventurers was abandoned after expending \$300,000. A scientific survey subsequently pointed out the true locality for sinking, when the work was recommenced and resulted in a complete success at a trifling cost, in comparison with the first attempt. Numerous other particular instances involving perhaps less pecuniary losses than those above enumerated might be pointed out, which have proved equally barren of results, from this same persistency in ignoring the utility of a proper education, on the part of those entrusted with mining engineering.

California, or rather the Pacific Slope, is just entering upon a system of mining enterprise, which in extent and value will soon vastly exceed that of any other portion of the globe; and the question is certainly a most pertinent one, whether we shall call to our aid the collective experience and wisdom of the past to assist us in the enterprise, or whether we shall go on, as we thus far have done, and still insist in blindly incurring the heaviest pecuniary penalties for the want of adequate geological and mineralogical knowledge. The merchants and capitalists of San Francisco, who do not own a dime in any mining enterprise are deeply interested in this question, from the fact that the more successful we are in our mining operations, the more rapidly will they extend, and in the same ratio build up this city and increase the value of our trade and traffic and our investments in real estate.

You who are venturing your hundreds or thousands of dollars in the various mining operations of the day are most deeply interested in the question. Are you willing to intrust operations in which your capital is involved, to incompetent hands? Would you not, rather, while we are yet in the infancy of mining operations, contribute something from the State's revenue, if necessary, to prepare those upon whom the future direction of our mines are to devolve, for a proper management of them? We may get along passably well with the few competent men we now have among us, perhaps for three or four years, or until we can establish a proper Mining School and send out a class of graduates who will be fully able to undertake the management of such mines, as are growing more and more complicated in their characteristics and developments, and, as a consequence, all the more in need of experienced and skilful men to take them in charge.

It is our intention to still continue the discussion of the important question of Mining Education, and in future numbers, we shall endeavor to lay before our readers, some practical plans for the establishment of schools where the science of mining—practical as well as theoretical—may be taught.

It would afford us pleasure to bring these facts to the attention of our Legislators, but the inclination of the legislative wisdom of the State seems to be turned to other channels than a study of our great leading interest—at least, it is so, if we are to judge them by the selection of newspaperial reading furnished by the State's liberality, in which the only exclusively mining press in our State has been almost entirely ignored. In this great matter of State interest, one of more vital importance to the commonwealth than any other which is likely to come before the Legislature during the balance of its session, not a single paper except the Press, has yet uttered a word. We intend to send a few copies to the Legislature *gratis*, while we are discussing this matter, hoping they may be received kindly, even if the subject to which we desire to call their particular attention may not be considered of sufficient importance for Legislative action.

#### WASHOE MINING CASES.

The following Mining Cases now pending before the First District Court, in Nevada Territory are set for trial as follows:—

- Feb. 26—California Co. vs. Charles Anderson et als.
- Mar. 10—Robert R. Moss vs. Gould & Curry Gold and Silver Mining Company.
- Feb. 27—Frank Perkins vs. Sierra Nevada Mining Co.
- Mar. 12—Chollar Silver Mining Company vs. D. S. Turner.
- Mar. 6—La Crosse Mining Company vs. Burning Moscow Mining Company.



# MINING AND SCIENTIFIC PRESS.

**THE STATE GEOLOGICAL SURVEY.**—Since the article under his head in another column, was put in type we have noticed an article in the *Evening Bulletin*, showing that the most creditable degree of industry has been manifested by the members of the Survey in prosecuting the work committed to their charge. Surveys have already been made in all the counties of the State but seven. The publication of the Reports and Maps now in a state of great forwardness, cannot be made until the proper appropriations are made therefor \$20,000 is now due the Survey for moneys already appropriated, but not paid for lack of funds. The field work during the last year has been carried on by Mr. Whitney at his own individual expense and there is now due him \$15,000 for such services. The *Bulletin* says:—

The time when the first annual report should have been made was at the meeting of the Legislature last year, but the Act was then amended, and Mr. Whitney authorized to combine his first and second reports into one, and lay the same before the present Legislature, and \$3,000 was appropriated for publishing 1,000 copies of the said reports. Owing to the vacuum in the State Treasury, however, so far as meeting the requirements of publishing the geological survey was concerned, not a dollar of the above appropriation has yet been received by Mr. Whitney; consequently there will be no reports this year.

We trust that the conclusion of the *Bulletin* may prove correct. The matter will soon come before the Legislature, and it is to be hoped that body will devise some means to spread before the people the valuable facts collected by the Survey.

**IMPROVED STEAM BOILER.**—Joseph Harrison, Esq., of Philadelphia, has recently invented and patented a steam boiler, which, it is said, is commanding high favor among engineers. Mr. H. was a partner of the Winans Brothers, of Baltimore, in their contract with the Russian Government for keeping in repair the great railroad from St. Petersburg to Moscow. He is now in Europe, whither he has been called by several skillful mechanics with the view to the introduction of his patent boiler on that continent.

## SAN FRANCISCO MINING NOTICES.

### ASSESSMENTS LEVIED.

Assessments upon Mining Stock have been levied as follows:—

Caledonia G. & S. M. Co. levied an assessment, Feb. 1, of 50 cents per share, payable immediately. Sale of delinquent stock will be made March 7th.

Moss G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 5 cents per share, Jan. 27, payable to the Secretary, at 28, Montgomery St.

Warren G. & S. Mining Co.—An assessment of 75 cts. per share was levied Jan. 26, payable to the Supt., at Virginia City, or to the Sec., 428, Montgomery St.

Warren G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable to the Sec. in this city or to the Supt. at the mine.

El Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to the Supt.

Gaudaloupe S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or to the Superintendent at the mine in Aurora, (Esmeralda).

Dios Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cents per share was levied Jan. 24, payable immediately.

Sonora Mining Co.—An assessment of 25 cents per share was levied Jan. 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Adriatic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norecross—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skae, at the Mine, on or before Feb. 25.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount Davidson Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

Hale & Norecross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and C St., Virginia City.

Baltimore America Consolidated.—An assessment of 50 cents per share was levied, Jan. 5.

Savage.—An assessment of \$35 cents per share was levied, Jan. 7.

Hawley.—An assessment of 25 cts. per share was levied Jan. 5, payable in 30 days.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

RED, WHITE AND BLUE G. & S. M. Co. levied an assessment of 25 cts per share, payable on or before Feb. 1st, office cor. Pine and Montgomery Sts.

Mina Prieta S. M. Co.—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

### ASSESSMENT SALES.

Sales of Stock for non-payment of assessments are advertised to be sold as follows:—

North Potosi Mining Co.—Sales delinquent stock will be made March 17.

Peytona G. & S. Mining Co.—Sales of delinquent stock will be made March 1st.

Cole Silver Mining Co.—Sales by Jerome Rice & Co., 327, Montgomery St., San Francisco, on the 25th of February.

Combination G. & S. Mining Co.—Sale by E. S. Spear & Co., at 433 California St., on the 10th day of March next.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

Desert Mining Co.—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

### GENERAL NOTICES.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 foot of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

Henry Martin G. & S. M. Co.—"Thomas Wallace, Trustee," gives notice that whereas certain parties illegally claiming to be Trustees of this Company, have changed the name of the Corporation to the North Star G. & S. M. Co., and illegally elected officers for the same, the public are cautioned against such acts, etc.

THE SWEENEY CO., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK CO., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Beach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

## ESMERALDA MINING NOTICES.

THE ZENOBIA LODE COMPANY, give notice that they claim a superior title to the Johnson Co., claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. F. Dorsey and James Elder,

**ORE TESTS.**—Several inquiries have been made to us of the different chemical tests that will discover traces of silver and copper in the rock. If our friends who are conversant with this matter will forward information respecting such chemical tests to us, we will be happy to give them publicity. [*Amador Ledger*].

Persons interested in the above will find the desired information, and much more in the same connection, all valuable to copper and silver prospectors, in late numbers of this paper. A remittance of six months or a years subscription to the MINING AND SCIENTIFIC PRESS, will afford them all the valuable information obtainable from books in relation to prospecting for either silver or copper, and assaying and testing ores of the same. The dissemination of that class of information is the specialty to which this paper is devoted, and no mineral prospector in the silver and copper regions of California can invest \$4 to better advantage than by sending the same to this office and becoming a subscriber and reader of the Press. We shall be extremely happy to receive the names of all who may favor us with cash patronage. We also pledge ourselves at the expiration of the year to refund to any party double the amount of his subscription, who may honestly think he has not got the worth of his money in valuable information from our columns.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



## Mining and Scientific Press.

W. B. EWER, . . . . . EDITOR.

MONDAY EVENING . . . . . FEBRUARY 23, 1863.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - - Proprietors.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## MINING—LEGITIMATE, SPECULATIVE AND SENSATIONAL.

Under the most favorable circumstances, and under the best and most legitimate management, mining for the precious metals, including copper, must be essentially speculative. No amount of knowledge, either theoretic or practical, or even the most judicious combination of the two, can at all times tell us where the ore is; indeed we can only approximately know where it is *not*, beyond actual exploration. We can only say, in view of any contemplated operation, "there is a strong probability that there is a rich mine here or there—or there is but little prospect that one will be found in this or that locality." The very nature of the business renders it speculative.

## LEGITIMATE MINING.

Ordinary mining adventure, to be legitimate, should be kept within certain recognized limits. Notwithstanding the great uncertainty necessarily attendant upon all mining undertakings there are, however, certain principles accepted—the results of the experience of ages—which, although they may be without the limit of perfect scientific definition, and consequently subject to no fixed laws like legitimate commercial transactions, still they are capable of constant application, and, when judiciously applied will approximate mining adventure very nearly within the limits of certainty. Legitimate mining can no more be held responsible for the failure attendant upon unskilled or speculative operations, than can legitimate mercantile transactions for the wild and disastrous operations of visionary speculators.

Mining, however, being, as we have already stated, necessarily speculative; in isolated operations, of course, those who adventure, if reasonable men, will be prepared to incur occasional losses, where they had most confidently looked for the fullest success. Taking, however, the class of legitimate operations in any given district, as a whole, the result will uniformly show very large balances of profit. It is in consequence of this very fact that mining everywhere becomes such a fruitful field of speculation. Brilliant mining successes can find no parallel, in their ratio of profit, in any other industrial pursuit.

Of course the chances or prospects of any proposed adventure must be, to a certain extent, a matter of mere arbitrary opinion, and upon which even those most competent to judge must be expected to differ. In a matter where mere opinion enters so largely, and where the limits of probable success are so incapable of definition, it is natural, that even the most careful adventurer should often involuntarily slide into a grade of

## SPECULATIVE MINING.

Speculative mining may be represented as a "sliding-scale" of operations graduated all the way, from a nearly legitimate undertaking to one entirely devoid of principle, and so reckless in its character as to render absolutely criminal any attempt to enice into it an outside or not thoroughly posted party. This is the class of operations most detrimental, in its general results, to legitimate mining, and the one which involves issues of the highest importance to

the growth of all mining enterprise. Speculative mining, of the most uncertain character, is often openly entered upon in good faith, by the adventurers, in response to the morbid gambling propensities so deeply engrafted in human nature, everywhere. This reckless class of mining, although it may be conducted openly and fairly, with a full disclosure of the vastly preponderating chances against success, is nevertheless, most pernicious in its tendency—the brilliant successes now and then attending it, operating like the leading prizes in lottery schemes to induce thousands to invest their last dollar in a "chance," hoping that "luck" may favor them for once.

Speculative mining also includes that peculiar class of operations which are gotten up like Peter Piuder's Razors—to "sell." These mines are usually merely nominal in character. They sometimes have a locality on some wild cat "extension," sometimes not, in which latter case they are purely speculative, with a mere paper existence—nothing more, nothing less—just sufficient to give the concern a legal existence upon the record. Such things always have, and always will exist, so long as legitimate mining affords a basis for such illegitimate operations. Operators, sellers and buyers in such stocks are to be classed with thimble riggers and their dupes. Honest men will not engage in them. Intelligent men cannot be duped by such shallow pretences. It will be a long time ere the world will be purged of villains or fools.

## "SENSATION" MINES.

A new class of bogus mining has come into note, which has been most aptly termed "sensational mines." To manage well a sensational mine requires considerable tact and judgment. It must also have a certain extent of substantial basis on which to be "managed." The mine is usually a pretty good one, and one which, if its mineral value should be kept within proper bounds would be a productive one to work. But the "sensational" operator has no idea of working his mine—not at all. He has struck a "good thing." His knowledge of mining assures him that it is but a "pocket" or "chimney" or mere chance and limited deposit of some kind. His purpose is not to sell a mere worthless thing for a large sum of money—but to sell a "good thing" for five or six times what it is worth. Having decided upon his "base of operations," the sensational operator begins by calling attention to his wonderful "discovery," which to the judgment of the inexperienced outsider does really appear most wonderful. Such being the case there is no difficulty in obtaining favorable reports, from even very respectable agents. By the various means of puffing, exhibiting specimens, etc., an excitement is easily gotten up and daily increased as the number of buyers is augmented; each new purchaser becomes in turn elated with his fortunate speculation, until the shrewd originator of the scheme has got rid of all his stock. Of course when a working company has been fairly organized and active operations commenced at the mine, the bubble bursts.

Under the head of Sensational Mining should also be ranked the "Bulling" and "Bearing" operations so common among Brokers and others in every important community, where stock operations occupy anything like a prominent position in business transactions. Instead of acting simply as brokers and advising their clients to buy or sell in whatever they consider advisable within the range of mining adventure, it has become a not unfrequent practice among this generally useful class of men to combine together in cliques for the purpose of working up to "sensational" prices certain stocks, for speculative purposes. We fear that such transactions are not altogether unknown on Montgomery Street. The facility with which this may be done is well known to the "initiated." Perhaps this class of sensational operations is as frequently resorted to as any other, and rarely fails of being successful, when properly managed. This evil is not of recent growth. Both here and in Europe it has been a source of heavy and grievous injury to legitimate mining operations. Evils of the various characters which we have passed in brief review are unavoidable in any mining community; but however much they may affect individuals they should never be charged to the account of regular operations. Mining as an investment, when confined within its legitimate limits, will show quite as large balances of profit as any other business, and as a source of national wealth and strength is second to no other industrial pursuit.

## THE STATE GEOLOGICAL SURVEY.

We understand that a determined effort is to be made in the present Legislature to defeat the annual appropriation for the continuance of the important work of the State Geological Survey. As an evident feeler in this direction we notice a communication in the Evening Bulletin, of Wednesday last, complaining of the apparent inaction of the commission, and more than intimating that no practical results are to be derived therefrom. The writer may be honest in his conclusions, but if so, he is evidently misinformed as to the magnitude of the work before the Commission, and the time required to collect and classify the observations, in such a manner as to bring out the practical information sought for in its establishment. Considering the influences under which Government appointments are usually made, the inviolable system of favoritism which almost universally obtains, we have reasons for believing that the State has been most fortunate in securing the services of the eminent gentleman who stands at the head of the Commission. By general accordance of the scientific world Mr. WARRINGTON SMYTH, of England, and J. D. WHITNEY of the California Survey, rank respectively, as first and second, among living men in the particular sphere of practical geology—especially as applied to mines and mining. The State of California will take a most unfortunate step backward if it fails to continue, to a complete issue, the work which we believe has been so systematically commenced by Mr. WHITNEY. Our people and the Legislature may rely upon it, no irritating system of derogation, or dread of being charged with dilatoriness, or "theorising," will deter this gentleman, so long as he holds the position to which he has been assigned, from proceeding with his work in a manner commensurate with the importance and intricacy of the undertaking. He will exercise his own judgment as to the time and means proper to be employed in the collection and registration of facts—often of the very least importance when isolated, but, when arranged and brought to bear one upon another always developing the most important truths. Without this system of a careful generalization of accumulated facts involving time as well as study, no real advance can be made in scientific research. Anything short of this would be merely the work of amateurs—unsatisfactory, unreliable, and of no practical value. We have no knowledge of the actual condition of the work at the present time. We found our inferences of its favorable progress upon the well known practical and scientific reputation of the gentleman at its head, and his equally well known devotion to his favorite science, and untiring industry in everything which he undertakes. We have never met the gentleman, or exchanged a word with any member of the Commission; but we have understood from other sources more or less intimate relation with the Commission and fully competent to judge of its progress, that a valuable report is now in the hands of the State printer or on its way thither, through the Legislature which will give as full a detail of the labors of the Commission thus far, as the nature of the work will admit.

We understand that the English Government has decided to order an early geological survey of British Columbia. If our Legislators should be so penny wise and pound foolish as to discontinue our survey, we would suggest to the Government the propriety of availing themselves of the talent and experience which, we in our foolishness, may thrust aside. Indeed, we understand that correspondence to that end has already been unofficially inaugurated by our British neighbors.

It should be borne in mind that if this work is suspended at its present stage, its re-umption by another Commission would have to be pretty much *de novo*; very little aid would be derived from the unfinished labor thus far performed. And as the work *must*, in the nature of things be carried through at no very remote day, it would be well for our economising Legislators to bear in mind, that, under such circumstances the money thus far expended would result in very little if anything more than *nil*. If retrenchment must be resorted to we would suggest that numerous other, perhaps less important matters might be dispensed with. Perhaps the Commission, in its present stage, and under our existing condition of present taxation, might be somewhat curtailed in the number of assistants, etc.; but, for the credit of the State and the furtherance of its chief industrial interest, it says nothing of the advancement of science, we sincerely



trust this important undertaking will not be completely set aside. Better things are expected of California. Nature has made her an especial favorite by implanting within her capacious bosom treasures the most varied, rich and important; and with a profusion nowhere else to be found throughout her dominions. We shall be false to our interests, false to our destiny, and unworthy the reputation we have thus far fairly merited of being the most energetic and progressive community on the globe, if we take such an inglorious step backward.

## GENERAL MINING STOCK REPORT.

## REPORT OF SALES

At the San Francisco Mining Stock Board,  
For the week ending February 21, 1893.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Ophir	16,800	12	\$300	2000	2000	2625	2650	2700	2750
Gould & Curry	4,800	4	600	3200	3200	—	—	3250	3275
Central	1,800	12	300	—	—	—	—	—	—
California	8,000	12	300	—	—	—	—	—	—
Chollar	5,600	4	200	500	565	565	570	—	525
Potosi	2,800	12	400	145	155	100	158	170	175
Hale & Norcross	8.0	1	500	550	550	—	—	560	570
Sierra Nevada	3,000	1	300	77	65	73	75	72½	70
Danby	8,000	4	500	—	—	—	260	290	250
Burning Moscow	4,800	2	100	74	80	80	82½	82½	100
North Potosi	2,000	1	300	26	26	25	20	22	27
Rogers, F. D.	3,000	1	250	9	12½	10	—	—	—
Marcellith	7,200	12	125	—	—	—	—	—	27½
Charles Caney	1,800	1	30	55	—	55	50	—	—
Sacramento	1,800	1	500	52½	47½	50	62½	65	70
Lucerne	1,800	1	100	—	—	—	—	—	—
Lady Bryan	6,000	1	500	—	—	—	—	—	—
Savage	800	1	—	1300	—	1300	—	—	—
Iowa	—	—	—	—	117½	—	110	—	—
El Dorado	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel	1,600	1	—	26	23	25½	25	30	35
Mount Davidson	10,000	3	200	5	5	5½	5	5	5
Wide West	2,600	4	60	355	305	370	375	380	360
Antelope	1,200	1	500	290	280	275	290	295	297
Esmeralda	1,600	1	1,000	47½	47	50	50	38	—
Real Del Monte	4,400	1	400	36	37	45	40	32½	38
Atlatla	1,200	1	100	10	—	10½	10	10	11
Utah	—	—	—	100	90	95	95	105	105
Silver Hill	3,000	1	—	33	33	39½	36½	32	35
Josephine	—	—	—	25½	21½	22	22	20	21
Coso	—	—	—	14	10	18	18	19	—
Willow Springs	—	—	—	22	25	24	—	25	—
Mina Prieta	—	—	—	135	135	—	—	—	—
Dios Padre	—	—	—	40	—	—	47	—	45

SAN FRANCISCO, February 23th, 1893.

## STOCK REMARKS.

The Mining Market for the week just closed has continued to manifest the fair degree of activity noticed on the week previous. The disposition to operate in second and third class stocks also continues, and exhibits even an increased earnestness. The constantly increasing interest in, and attendance upon Mining Stock Sales, with the large amount of capital seeking investment in that direction, evinces a degree of confidence in mining operations, which cannot fail to exert a most healthful influence upon that great leading industry on the Pacific Coast. In the transactions of the past week first class stocks have been almost entirely ignored, Ophir has been scarcely touched—no sales appearing. We quote but a single transaction.

Gould & Curry has plenty of buyers but no sales—not a foot has changed hands this week.

Chollar remains firm at about last quotations. Very little stock in the market. We understand that \$600 is freely offered on the street without sellers, although the bids at the Stock Board for the week have varied from \$500 to \$570, closing at \$525.

Potosi has improved about \$30. Sacramento has advanced \$20. Both these stocks are in demand at quotations, with but little in the market.

Burning Moscow has been quite a favorite during the week. It has advanced from \$74 to \$110, and closes the week with an upward tendency.

Burnside has also become a sudden favorite in this market, advancing from \$22, on Monday to \$70 on Thursday. It continued fluctuating from that time till Saturday evening when it stood at \$50. The cause of this movement was a telegraphic dispatch announcing new and important developments at the mine.

Mount Davidson, which has for a long time stood at from \$4 to \$4½, has taken an upward movement and closed the week at \$6. Work upon this mine is being very energetically prosecuted, and still further advances may be confidently expected, at an early day.

ESMERALDA STOCKS still continue to claim a large share of attention. The Wide West has made a material advance, going up about \$40. One sale has been made the past week at \$400, half cash, balance in 60 days. Other quotations from this district remain at about last week's figures.

COSO MINES remain at about last week's quotations. Transactions light. MEXICAN MINES are but little dealt in. Mina Prieta is quoted at \$135, and Dios Padre at \$40. The former of these companies has a very superior class of machinery nearly completed at their mine. It will be running inside of two months.

The machinery for the Dios Padre, we believe, is now upon the ground and in process of erection. There are many other mines in the vicinity of the above which we presume will soon be heard of in this market.

MINING STOCKS AT AUCTION.—Jerome Rice & Co. sold the following Mining Stock at Auction on Wednesday last: 50 shares Bullion at \$2 13; 50 at \$2 50. 16 shares Sierra at \$22½. 22 shares Grass Valley at \$11; 25 at \$9. 20 feet Panama at \$1 12. 25 feet Hart Co. Devil's Gate District, at \$75. 151 feet La Forge Co. 37½c. 50 feet Centerville Co. at 20c. 80 shares Louise, at 15c. 25 feet St. Lawrence at 25c.

## TRANSACTIONS IN SHARES.

## NEVADA TERRITORY.

Ophir—12 at \$2700.  
Chollar—20 at \$570.  
Sierra Nevada—10 at \$77; 18 at 75; 20 at 75. 40 at from 75 (a 80).  
Burning Moscow—40 at \$75; 100 at 75; 40 at 80, b'r 30 ds; 40 at 85, b'r 30 ds; 6 at 80; 50 at 80; 48 at 80; 20 at 86, b'r 30 ds; 20 at 80; 9 at 80; 44 at 85; 6 at 82½; 11 at 90; 20 at 100; 41 at 100; quoted by Bates & Co. at \$110.  
North Potosi—25 at \$26; 10 at 27.  
Sacramento—20 at \$50. 5 at 50; 5 at 55; 6 at 60; 20 at 50 Cha's Caney—10 at \$55; 10 at 53; 10 at 52.  
Savage—5 at \$1300.  
Iowa—10 at \$117½; 5 at 110.  
Norton—5 at \$30; 10 at 30; 25 at 35.  
Cedar Hill Tunnel Co.—50 at \$5; 51 at 5; 50 at 5; 11 at 5.  
Mount Davidson—50 at \$4; 10 at 6.

## ESMERALDA DISTRICT.

Wide West—5 at \$342; 50 at 345, 5 at 360; 5 at 370; 2 at 370; 5 at 375; 5 at 375; 5 at 377; 10 at 400, half cash, bal. 60 days; 5 at 380.  
Antelope—10 at 300 b'r 30 ds.; 10 at 300; 17 at 295.  
Esmeralda—2 at \$50; 14 at 46; 10 at 47; 10 at 47½; 20 at 46; 14 at 49.  
Real del Monte—10 at \$36; 14 at 36; 30 at 37; 30 at 39; 5 at 40; 10 at 42; 5 at 41; 10 at 39½; 10 at 38.  
Atlatla—20 at \$10; 25 at 11½; 25 at 12; 10 at 11.  
Utah—5 at \$100; 16 at 102½.  
Silver Hill—10 at \$34; 20 at 33, s. 30 ds.; 15 at 40.  
Josephine—25 at \$27; 10 at 20½; 5 at 21.  
Coso—20 at \$17; 8 at 20; 10 at 17½.  
Willow Springs—10 at \$25. [60; 2 at 57½.  
Burnside—40 at \$30; 10 at 35; 10 at 50; 30 at 67½; 5 at Gov. Nye—55 at \$4½; 35 at 12.  
Cole—25 at \$11; 20 at 12½; 20 at 13; 25 at 13; 20 at 13; 20 at 18; 19 at 19; 5 at 16; 15 at 17; 5 at 17; 20 at 18 7 at 18; 10 at 19; 20 at 22.  
Pacific—20 at \$11; 20 at 12.  
Bullion—325 in lots at \$25.  
Union Tunnel Co.—10 at \$26.  
Union—(Russ District)—335 at \$1 62½.  
Pride of Antelope—25 at \$5. Redorder—10 at \$12½.

## COPPER STOCKS.

Napoleon Copper Co.—4 at \$40; 5 at 39.

## VIRGINIA CITY STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

Ashland	\$ 9 00	American Basin Co.	20 00
La Cross	25 00	Hawkeye	20 00
Santa Fe	12 50	Consolidated Cedar Hill	4 00
Empire	9 00	Utah	5 00
Santa Rita	35 00	Industrious	4 00
McBee	25 00	North American	5 00
Zouave	10 00	Philadelphia	2 00
Belvidere	15 00	Sigel	2 00
York	4 00	Virginia	5 00
Governor Nye	7 00	Commercial	4 00
Battle	20 00	Utic Sam	6 00
Payson	—	Birmingham	3 00
Durgen	—	Cole	20 00
El Dorado	47 50	Golden Eagle	10 00
Summit	5 00	DeCATUR	5 00
Washington Ledge	6 00	Atchison	150 00
Milton	100	Comet (Simpson's Park)	50 00
Cedar Hill Tunnel	5 00	Mohegan	6 00
Hazel Green	5 00	Golden Era	6 00
Laboring	11 00	Oscoda	10 00
Swezey	—	Madison	—
Caledonia	10 00	U. S. Tunnel	—
St. George	4	Sacramento	55
Mary Ann	25	Harrison Co., Geller Ledge	4 00
Adriatic	2	Monarch	20
Golden Gate	2	Irving	15
U. S. Mining Company	5	Birmingham	10
Evening Star (Argentine Dist)	30	Oreana	6
Dayton Company	20	Union Mining Co.	15
Monterey Co. (Spring Valley)	20	Empire Company (Spring Val)	25
Grass Valley	11	Baltimore American	25
Yellow Jacket	200	Sierra	22 50
Bullion (consolidated)	25	Burnside	70 00
Sierra Nevada	70	Birdsall	60 00
Texas	5	Alta	20 00
Sinaloa	7 50	Pride of Washoe	15 00

## WASHOE STOCK REMARKS.

[Compiled from the DAILY TERRITORIAL ENTERPRISE.]

There has been a decided activity in stock to-day. Mining claims are in demand with an upward tendency, which have heretofore been unsaleable at any price. A discovery—supposed to be silver ore—has been made at Steamboat Springs. Five feet of Buchanan, sold to day, at \$70; 20 of Union at 13; 20 of Dunn at 7½; 10 of Sacramento at 55; 50 of Wellington reported sold at 20. The latter Company has been consolidated with the Eastern Slope Co., under the name of the Wellington Company. It is understood that immediate steps will be taken to incorporate.

TUESDAY EVENING, February 10th.

Allen is required for and saleable at from \$40 to 45; Sierra Nevada is in demand at 70. This stock generally finds its way to the San Francisco market. But little is held or offered here. Sacramento is in demand at \$55—none being offered. Utah is offered at 50 without sales. Several lots of Zouave are reported sold at 6 and 6½; there will probably be some demand hereafter for this stock, the Company having taken steps to resume operations on the claim, and also to incorporate. The Hazel Green Company are reported to have struck good rock in the face of their tunnel. The Banner Company are preparing to incorporate. A new discovery on American Flat is reported, supposed to be rich. Ten feet of Sierra Nevada sold at 70; 20 of Dunn at 7; 10 of Union at 12½; 25 Birdsall at 20; Texas is in demand at low rates.

WEDNESDAY EVENING, February 11th.

There has been considerable activity in stocks, to-day, and a large number of transfers have been made; but details are not given.

THURSDAY EVENING, February 12th.

Stocks, to-day, were less active than for several days previous, probably owing to the storm which raged throughout the day. Few sales were made and at figures below former rates. The Wellington and Eastern Slope Companies have consolidated their claims, and filed articles of incorporation under the name of Bullion Mining Company. Ten feet of this stock sold to-day at rates not desired to be made public.

There is some enquiry for Zouave; also for Oriental, at low rates. Texas is in demand at low rates: 95 feet sold at \$2. Ten feet of Pride of Washoe sold at 15; 5 feet of Sacramento for 55. Accounts from this mine are very favorable for the success of the Company. Hazel Green has demand at low figures; Birdsall is quiet at 20; Allen finds buyers at 45; Santa Fe is offered at 12½; Ural is attracting some notice, although no direct bids are made. Sinaloa is offered at 7½; ten feet of Dunn sold at 6½.

FRIDAY EVENING, February 13th.

The sky is again cloudless and the stock trade has shown unwonted animation to-day. Our brokers are largely supplied with San Francisco orders, many of which are being filled with considerable difficulty. Everything bespeaks extraordinary activity in stocks the coming spring and summer. Allen is advancing in favor rapidly, and is in demand at \$60; seller are scarce however at these figures. Sierra Nevada is also in request at San Francisco quotations. Bullion stock is enquired for at \$20 per share, but there is little in the market. Texas still in the market at low figures—\$2 @ 3. Fine looking ore is shown from the Pride of Washoe. This stock is still held at \$15 @ 20. Burnside is in market at \$25, and there is something of a disposition to deal in it at that price, but no sales are reported. Milton is offered in small lots at \$100, but a majority of the holders are awaiting higher bids. The sales reported to-day are, 15 feet of Allen at \$60; 10 feet Bullion at 21, 25 feet Oriental at 45; 10 feet Birdsall at 19½; 20 feet Zouave at 6½, and in large demand at that figure.

SATURDAY EVENING, February 14th.

The business of the week has been large, and shows a decided improvement upon the transactions of the last. Stocks to the amount, probably, of \$50,000 or \$75,000 have changed hands in this market during the past seven days, and the brokers are still largely supplied with unfilled orders.

The Texas Mining Company was incorporated to-day, under the Territorial laws, and there is some activity in the stock; 45 shares sold at from \$3 to \$5. There is still some inquiry for Zouave, at a slight advance on yesterday's quotations. No visible reason for this activity is discernable. The only sale reported is 20 feet at 7 50.

Yellow Jacket is held at \$225. Very fine ore is being taken from the disputed ledge. Allen is finding buyers at \$60. Bullion is in request at \$20, with little offering. The Oriental is meeting with purchasers at \$4 @ \$5 ten feet sold at \$5.

MONDAY EVENING, February 16.

The week opens with a lively demand for stocks, and a large number of transfers have been made to-day. Burnside has been the subject of some excitement, and the market for this stock, which opened at \$25 in the morning, reached 75 at 2 o'clock, then receded a shade, until 6. The cause of this sudden animation was the exhibition of some very fine ore from this claim. Some fine looking ore is being shown from a new location on American Flat. The rock was taken from a shallow shaft sunk upon a ledge toward which a number of tunnels have been directed for two or three years past. Zouave is in demand from \$9 @ 10, and little has been offered at these figures. The tendency of this stock is decidedly upward. San Francisco capital is seeking investment in it to something of an extent. Bullion had ready sale at \$25; Yellow Jacket at \$175 to 200; Texas at 9; La Cross at 18 @ 20. Ten feet Yellow Jacket sold, to-day at \$200; ten of Union at 15; 40 of Zouave at 8 @ 10; 100 feet (probably) Burnside at from 27½ @ 75; 15 La Cross at 20.

## ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

Not having received our usual report for the week, we continue our last week's quotations.

	Bid.	Ask'd		Bid	Ask'
Peru (two ft. to the share)	5	—	Union Tunnel	20	—
Garibaldi	40	27	Utah	120	175
Heath	10	15	East Essex Ex. Ural	—	10
Falls of Clyde	—	—	Peru	—	10
St. Louis	12	—	X-Eliza and Constantuople	—	—
Hanover	12	55	consolidated	1½	—
Live Yankee	8	10	Chihuahua	20	25
Nevada	10	10	Aracoe	6	10
Del Monte	57	—	Pacific	5	10
Pride of Antelope	5	—	Old Winnemucca	—	5
Elina	—	—	William Tell	—	2½
Alturus	15	—	Ural proper	—	500 600
Fresno	9	15	General Jackson	18½	14
Silver Hill	—	25	Falstaff, Consolidation	4	5
Antelope	215	250	Atlantic	2	—
Wide West	365	375	Union Tunnel	20	—
Main Esmeralda	57	—	Rodie Bluff Consolidation	17	20
Newton	50	—	Strawberry	20	—
Ural Extension	10	10	Falstaff	4	—
General Hooker	10	—	Brazil	5	10
Bamboo	100	—	Amador	—	5
Bright Star	15	—			

Esmeralda Stocks offered at San Francisco valuation:

Esmeralda stocks offered at San Francisco auction.		Bid	
	Bid		
Antelope	\$215	Utah	120
Garibaldi	40	Real Del Monte	27
Silver Hill	24	Bamboo	70 to \$100
Atlatla	6	Ural	450
Wide West	365	Lord Byron	10
Main Esmeralda	57		

## TRANSACTIONS OF THE WEEK.

20 shares Ural sold at \$500.  
25 shares Strawberry sold at \$20.  
25 shares General Hooker sold at \$10.  
20 feet Peru sold at \$10.  
13 shares Heath sold at \$10.  
20 shares Brazil sold at \$5.  
25 shares Ural sold at \$5.  
25 shares Bodie Bluff consolidation sold at \$17.  
75 feet Garibaldi lode, Hartford Co., sold at \$20.  
20 shares Bamboo sold at \$75.  
10 feet Bright Star sold at \$12.  
10 feet Bright Star sold at \$15.



From our Edition of Feb. 16th.

#### MINING EDUCATION.

In our last issue we referred to some of the disadvantages under which the California miners, as a class, labored by reason of the lack of a proper Mining Education. We also adverted to the fact that the popular antipathy against the application of science to mining, which was so prevalent among California miners, six or eight years since, has lately been pretty much laid aside. It is now very generally conceded that an empirical knowledge of mining is not the way to succeed in that difficult and uncertain branch of industry. The occurrences connected with the discovery and development of our silver and copper mines have produced such a change in public sentiment that, at the present day, it is rare to find a man who will openly avow, even if he secretly entertains, a belief in a necessary antagonism between theory and practice. Practice and science have now joined hands in the mines, and the time has passed when the former will venture "to go it blind" in the vain confidence of shallow empiricism, unaided by science.

The attainment of a passable mining education, when proper facilities and instructors are at hand, is not a work of so much time and study as many suppose. The difficulties and mysteries involved in becoming an expert in planning and working a mine, and in acquiring a practical knowledge of their geological and mineralogical characteristics, are no greater than are to be met with in many other subjects in the usual programme of practical and theoretic education. Experience is the foundation of success in all human undertakings; but the only value of experience is the facility which it affords us to deduce from previous results, a knowledge by which to overcome new or greater difficulties. This is identical with the inductive process of the man of science. But he that confines himself to his own limited experience, shuts his eyes against the lights of science; and, in despising the experience of others, he will soon find himself buried in the darkness of empiricism, while those who have entrusted him with their business will surely behold their undertakings enveloped in a labyrinth of difficulties, which must sooner or later result in common and promiscuous ruin.

A large mine is a complicated machine, and we might with quite as much propriety place a ploughman, with no mechanical experience, whatever, in charge of a double cylinder printing press, as to place a man, whose experience in mining is confined to what he has done himself, in charge of a mining operation of any magnitude. The art of mining involves a general knowledge of mechanics, surveying, mineralogy and geology. To understand working a mine—boring, sinking, pumping, winding, stoping, hauling and ventilation a tolerably correct knowledge of every leading principle in mechanics is needed. Without such knowledge the miner will find it impossible to decide upon the most economical means and arrangements for transport either in the mine or on the surface, the kind and capacity of engines needed, or the character and class of machinery best calculated to perform the work before him. Laying out the work properly, each part with reference to another, requires a knowledge of surveying. To ascertain the proper place to sink shafts, involving calculations of the dip and strike of strata, probability of water, faults, &c., implies a knowledge of geology: while by the aid of mineralogy only, can he determine the nature and value of the minerals upon which he is working, or which may chance to come in his way. On a correct conclusion with regard to each and all these points depends the success of the undertaking. The employment of experienced men with liberal salaries, to superintend works of this description may safely be predicted as uniformly resulting in larger dividends to stockholders, and increased safety to mine and workmen. Experience, coupled with a proper application of science, is the only foundation of fitness for the position of Mining Superintendent. The lack of these requisites has cost English adventurers millions of pounds sterling—sometimes in the faulty opening of a mine, at others in the lack of mineralogical knowledge for determining the value and character of the mineral when found. We gave several instances of the latter in our last issue, we might multiply instances of the former *ad infinitum*.

It is to the lack of this latter information that we must attribute the delay in the development of the silver and copper mines of the State, a full decade beyond the time when

their existence should have been known as the result of actual explorations.

There is but one way to remedy the evils here passed in review and provide our State with a competent corps of mining engineers and superintendents—*A School of Mines must be established* under the patronage and partial control of the State. An institution of this kind is absolutely necessary to a proper development of our resources. We need it as a collector and conservator of mining knowledge past and progressive. We need it as an institution for the general diffusion of information in this branch of industrial science. We need it as a place where the working miner, the proprietor and the engineer may be drilled and schooled in the art of mining, in all its bearings. Such schools have long been in existence in nearly every country in Europe, where they are fostered with the greatest care by the different governments. We shall endanger our reputation as a progressive people if we much longer delay a movement in this direction. The losses of property and misdirected outlay of capital already scored up, (to say nothing of the sad loss of life,) and laid at the door of inexperience, would have liberally endowed half a score of such schools.

Our State Geologist, in his address before the Legislature two years ago, advised the early establishment of such a school. We have now a Legislative Committee on Mining. Is there any more important matter which can come before them than that which we are now discussing? Have they ever thought seriously upon it? If so, or if not, heretofore, why would it not be well, at the present time, to prepare the general outlines of a plan for such an institution, and let it go before the people, with a legislative endorsement, for future consideration.

Legislators are quite too prone to think that when they have enacted laws for the creation and collection of revenue, for the collection of debts and the punishment of crime, and, perchance, performed the herculean task of electing a United States Senator, they have fully discharged their legislative duties. They forget that there are other equally, if not more important duties to perform, in providing the means for properly educating the adult industrial class of society. This is universally done in Europe, at least to an extent sufficient to provide competent directors for all the great industrial interests of the land. We have neither time nor space to say more under this head than what will be merely suggestive; but we hold that it is quite time our Legislators should take this matter under consideration, and initiate some steps toward an ultimate accomplishment of the end in view. The present "let alone" policy must inevitably continue to result in serious losses, both to individuals and the State, and we shall be fortunate indeed, if our chief industry is not thereby soon completely buried in the darkness of that empiricism in which it is already so sadly floundering.

From our Edition of Feb. 16th.

#### MINING INCORPORATIONS.

Notwithstanding the attempts at editorial pleasantry that are so frequently indulged in by our contemporaries, at the lengthening list of mining Companies, and the cumulative exhibits, of the many millions of capital which they represent, "on paper," each passing month brings additional evidence that this wealth is far from imaginary. The constantly increasing values of the figures which appear in our weekly stock reports, appended to the leading mines on the Eastern Slope, are stubborn facts, which must soon make plain to the most unbelieving that the footings of the aggregate "capital," placed as a value upon the mines now in progress of development, are not much too high. Imagination can scarcely form any adequate conception of the mineral wealth, which is soon to be developed on the Eastern Slope, and throughout the entire length and breadth of the "Great Basin," whose Western and Eastern rims are formed by the rocky slopes of the Sierra Nevada and Rocky Mountains.

Several of these earliest formed Companies, which, in the estimation of the great mass of people at that time, fixed their capital stock at an almost fabulous figure, have already reached the immediate vicinity of their incorporate value and their stock will no doubt, ere long, be quoted at a handsome percentage "above par." Indeed, one of them has already exceeded its par value and is quoted to day at more than 60 per cent. advance.

Numerous others, second and third class mines, are making such favorable developments, at the present time, as give good earnest of an early approximation of their stock to par value.

A few years since scarcely a merchant in San Francisco could be induced to invest a dollar in any mining enterprise. To do so was to lose *caste*, and endanger one's credit "on change." Even our foundrymen, could not be induced to invest a dollar, in a business to which they were then, as now, indebted for almost their entire business. Now things are entirely changed, and one can scarcely find a man in San Francisco who does not own "feet" in some mining claim.

What matter is it if a large portion of these projected, companies should fail? All, or even a majority cannot hope to succeed. A sufficient number, however, will prove so remunerative as to return a handsome aggregate percentage on all the money invested. Hitherto the chief burden and losses attendant upon opening up the mines of California, have fallen upon the mining community almost exclusively, while the commercial and agricultural interests have been greatly profited at no risk. It is one of the conditions of mining, everywhere, that many individual losses must occur, which, however, are always made good in the general aggregate of profits; and it is creditable to the mercantile interest of this city that it has now taken hold of the matter of developing the mines of the State and is freely pouring out its capital for that purpose. The aggregate of these investments cannot fail to be highly remunerative, and will reward the losers even, in the increased business which they will create and concentrate in San Francisco. This city owes its very existence to the mines, and it betrays a feeling of selfishness in any man of means, to refuse to do his part in developing the interest upon which its prosperity depends. Every new Mining Company, whose organization is announced, is evidence that a new mine has been discovered, and that somebody intends to spend a little money for its development. Every such item is a matter of encouragement, and indicative that the great interest of the State is progressing. We trust the day is far distant when we shall fail to find in each morning's paper the announcement that some new mining organization has been effected during the previous day.

#### SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.



## LOWER CALIFORNIA

## Colonization and Mining Company.

THE AGENTS SENT TO MEXICO BY the above Company having returned per steamer Oregon, after having secured a tract of upwards of

**125,000 Acres**  
OF RICH AGRICULTURAL LAND,  
and a valuable silver Mine,

The Company is now prepared to furnish exact information to Colonists who have already engaged, or those about to engage in this

## SPLENDID ENTERPRISE.

It proposes to send a vessel about the first of March next, and there being but a limited number of shares

NO TIME SHOULD BE LOST BY COLONISTS.

Farmers Miners and Mechanics,

With families are particularly invited by the authorities of the Territory. The land selected, in point of fertility of soil, is not excelled on the Continent. The climate is unsurpassed in the world. The richest silver mines known to exist in the Territory are in the immediate vicinity and bordering on the agricultural lands of the Colony.

N. B. Bear in mind that a share of \$25, at present, only \$200, which entitles the holder to free transportation for self, family, and articles of personal use and an equal share in the land, the Company's Silver Mine, etc. The whole enterprise, being for the mutual benefit of members only.

Full information can be had, and Mineral and Cotton specimens seen, by applying at the Office of the Company, North-west corner of Clay and Front Street.

## BOARD OF TRUSTEES.

A. G. RANDALL, President.

Capt. JOHN H. BELL, V. President.

O. F. GEHRICKE, Secretary.

Trustees.—L. F. LOVELAND, ISAAC TABOR, M. D. MATHEWSON, H. C. PATRIDGE, I. ROWELL, M. D. Committee on Survey.—E. RICHARDS, Special Agent; Capt. R. C. ANDREWS, Surveyor.

## RASCHE &amp; SONS,

31 Montgomery st., bet. Bush & Sutter, SAN FRANCISCO.

WHOLESALE AND RETAIL DEALERS IN

Pianos, Sheet Music

ITALIAN STRINGS,

And Instruments of all kinds. Also,

Solo agents for the celebrated manufacturers,

A. A. GALE & CO., New York;  
C. MEYER, Philadelphia.  
T. GILBERT, Boston;

These Pianos they have always on hand, for sale or rent

## PIANOS FOR RENT.

New Music received by every steamer. New Music published. Music assorted and bound in the best style. A liberal discount made to the Trade and to Professors of Music.

## WASHOE

## Stock Exchange,

V. E. cor. Montgomery & Merchant sts. SAN FRANCISCO.

## L. W. NEWELL &amp; CO.,

Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.

## DEVOE &amp; COS.

STEAM ENGINE

—AND—

MACHINE WORKS,

Corner Market & Fremont streets,

ALL KINDS OF MACHINERY, SUCH AS STEAM ENGINES, SAW MILL IRONS, Flour Mills, Quartz Mills, etc., etc., made to order and repaired.

ALSO,

BLACKSMITHING, TURNING, FINISHING, PLANING, AND SCREW-BOLT CUTTING. AGRICULTURAL MACHINERY made and repaired. Repaired parts of Threshing and Reaping Machines and Threshing Teeth made to order, on the most reasonable terms.

Steam Engines and Boilers constantly on hand, and for sale cheap. Screw-Cutting and Turning Lathes for sale.

DEVOE & CO.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mount Survey," and derives its name from the fact that the trustees of the University College have selected a site of about twenty acres in the center of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,

No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office.

no 13 fino

## A. ROMAN &amp; Co.,

WHOLESALE AND RETAIL

## Book Establishment,

417 and 419 Montgomery street, SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals, but including such others as are employed in dental practice.

Pigott on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman. Gold Mining and Assaying; by Phillips.

Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake. Ore's Dictionary of Arts, Manufactures and Mines.

Weisbach's Mechanics of Machinery and Engineering. Nevillo's Hydraulic Formula Tables. Fresenius' Chemical Analysis.

Together with many other works in this and similar lines

Books imported to order on short notice.

A. ROMAN & Co.

417 & 419 Montgomery Street.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

## Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

## Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen

Schützen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

## Gird's Budding Knife.

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutters, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentee), San Francisco

sept-13m

## The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities.

The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

## News Stand,

AND A LARGE

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

## MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments & Musical Merchandise

SHEET MUSIC & MUSICAL BOOKS.

GENUINE ROMAN STRINGS, &c.,

Light's New Patent Insulated Iron Frame

is put into all of

LIGHTS & BRADBURY'S OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

in tone, delicacy of touch and durability.

All the leading Musicians of the country have

testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

MELODEONS AND HARMONIUMS,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN,

Warranted superior to all others.

Send for a catalogue and Price list.

oct

A. KOHLER, Agent.

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as MINING SUPERINTENDENT in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assayer of Copper Ore. He can give ample testimonies as to his capacity for the position he seeks.

Apply at this Office.

## PHILADELPHIA BREWERY,

Second St, corner of Folsom, SAN FRANCISCO

## Hoelscher, &amp; Wieland Proprietors.

Thankful for past patronage to a discriminating public, we beg leave to apprise at the same moment our many friends and patrons that the above well known Brewery has been permanently located in our new premises, on Second street—the former residence of Capt. Folsom where we shall endeavor to continue in furnishing our numerous patrons with the best article of "Beer." We shall strive to perpetuate the good reputation for promptitude and the faithful execution of orders as heretofore, and thereby increase our custom.

Nov 9

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garrett's Patent Improved Journal Metal."

F. G. BEPLER,

Practical Coppersmith

No. 115 (Old No. 22) Bush street,

Between Sansome and Battery, SAN FRANCISCO.

Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and Confectioners, as well as all other kinds of copper work. All orders from the country promptly attended to.

## FREDERICK KESMODEL,

Cutler & Surgical Instrument Maker

817 KEARNY STREET,

Between Jackson and Washington streets,

SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupture, or any one interested, is called to his new method of fitting and adapting Trusses to the different cases. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as horse, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.

FREDERICK KESMODEL,

Inventor and Patentee

## LABOR-SAVING

## Rock Drilling Machine,

TO ENGINEERS, RAILROAD CONTRACTORS, TURNPIKE and Quarrymen. The subscriber, Patentee and Agent for GARDNER'S PATENTS, will continue to receive orders for

HAND, HORSE, AND

STEAM-POWER MACHINES.

The Hand Machines are expressly adapted for working in Tunnels, Galleries, etc., one man performing the labor of three in the ordinary way.

A FOUR-HORSE POWER MACHINE, operated by one man, drives a machine capable of drilling a four to six inch diameter hole in granite four feet deep, and in hard limestone, six feet per hour—the rapidity of the work being limited only by the durability of the steel drill.

Satisfactory reference will be given as to the practical working of the machine, and its entire success in reducing the cost of drilling holes to one-tenth of the former expense, and on a rock excavation of any extent, from fifty to seventy-five per cent. on the entire work. Responsible parties who have rock excavations to make in any part of the State, the subscriber will undertake and guarantee to perform the work required, at a saving of at least twenty-five per cent. over any other process. Address orders to

WM. W. DUNN,

Fremont street, bet. Market and Mission, San Francisco.

## LATEST IMPROVEMENT

## in Ladies' Buckles.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trifles.

Orders from the country respectfully solicited. For particulars call at or address, FREDERICK REICHEL, Manufacturing Jeweler, 620 Merchant street, San Francisco.

## REMOVAL.

OFFICE OF THE PACIFIC METAL-urgical Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent, 318 California street, near Sansome, up stairs.

## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street,

Opposite Battery, San Francisco.

## FULTON FOUNDRY &amp; IRON WORKS

HINKLEY & CO.,

MANUFACTURERS OF STEAM ENGINES,

Quartz, Flour and Saw Mills; Cast iron Fronts for Buildings, Mining Pumps, and all kinds of Machinery Amalgamators, Etc.

Nos. 47 & 49 First Street,

Between Market and Mission, San Francisco.

ALL kinds of Iron and Brass Castings furnished a short notice. Every style of finishing to iron when cast. Repairing to Machinery neatly done. Patern Making in its various forms.

D. B. Hinkley, Wm. E. Worth, Wm. A. Field



**Instruction in Assaying, Etc.**

A SCIENTIFIC AND PRACTICAL CHEMIST NOT HAVING the whole of his time occupied with his present business, is prepared to teach the various branches of Chemistry and Metallurgy, is willing to teach the method of assaying GOLD, SILVER and COPPER, alone, or to teach the regular systematic course of Qualitative or Quantitative Chemistry.

Address, T. P.  
Post Office, Box No. 167.

**WHEELER'S****Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

no16-tf ZENAS WHEELER.

**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

**CROCKERY,**

GLASS WARE,

**FRENCH CHINA,**

Coal Oil Lamps, Table Cutlery,

**CLOCKS,**

Silver Plated and Britania Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET,

[CORNER OF MERCHANT,]

no16

SAN FRANCISCO.

tf

**LEANDER RANSOM,**

Civil Engineer

AND

**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oc7-3m

**SQUARZA'S PUNCH.**

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidesdorff street,

Opposite the What Cheer House, San Francisco.

**PEOPLE'S****Steamship Line!**

CONNECTING

CALIFORNIA AND NEW YORK,  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**

E. HOWES ..... COMMANDER,

Will be dispatched for

San Juan del Sur,

From Mission street Wharf,

Punctually at 9 o'clock, A. M., on

WEDNESDAY, - - - MARCH 11, 1863.

Connecting at GREYTOWN with the Splendid Steamship  
ILLINOIS ..... 2500 Tons.

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to  
I. K. ROBERTS, Agent,  
a20 No. 407 Washington Street, opp. Post Office.

**DONAHUE'S**

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost. PETER DONAHUE.

**LEWIS COFFEY AND RISDON,**

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
LEWIS COFFEY J. N. RISDON.

**GREAT REDUCTION**

IN PRICES.

**STANFORD BROTHERS,**

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

**Lamp Stock**

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPEERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less than they can afford to. apl6tf

**P. M. S. CO.**

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

FOR PANAMA.

The following Steamships will be dispatched in the month of February, 1863.

February 21st, Steamer St. Louis.

Will leave Folson Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

Je4 Corner of Sacramento and Leidesdorff sts.

**TO OWNERS OF WATER-POWER****Beth's Hydraulic Pressure Wheel.**

THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will

Save in Transportation Material and Labor, from

25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

83- This Wheel is fully GUARANTEED.

Jan19-1f

**Holiday Presents!**

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

**BRAVERMAN & LEVY'S,**

621 Washington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. ALSO,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY.

No. 621 Washington Street, Facing Maguire's Opera House.

Dec 29 1m

**Agency For Patents.**

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,

Office: 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

**For Sale Cheap!**

A HORIZONTAL STEAM ENGINE OF 4-Horse Power, Flue Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,  
Federal Building, cor. Battery and Washington Streets, Room, No. 28.

WANTED by an Intelligent and active young man a Situation by which he may obtain an honest livelihood. He is about 18 years of age, and is a good penman. Enquire at this office.

**DEETKEN'S****Chemical and Metallurgical Works.**

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for her purpose. nov8-3m

**JULIUS SILVERSMITH,****Commissioner for Nevada Territory,**

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets.,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

**JAMES PHELAN,**

(Late J. & M. PHELAN.)

IMPORTER AND JOBBER,

**Wines, Liquors, Etc., Etc.,**

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-1f.

**THEODOR KALLENBERG**

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and the Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. No. 4 Sansome street, corner Market, a17-3m) San Francisco.

**PALMER, HANSCOMB & CO.,****GOLDEN STATE FOUNDRY**

AND MACHINE WORKS.

First Street, near Market, San Francisco

RESPECTFULLY SOLICITS ORDERS for all kinds of MACHINERY, for Mining and other purposes. Please send Plans and Specifications.

Having the most complete arrangements and appointments for finishing and executing any and all kinds of Castings and Machinery on this Coast. San Francisco, November 29, 1862. 3m

**50 lbs. MARINE AND****Fire-Proof Paint.**

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, and six other Minerals. When used on the Deck Bottoms of Ships, it is equal to a coat of Stone, at quite equal to Copper, no worms will ever effect it, at cheaper than any other paint.

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works

**35 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfect Fire Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE:—Mix three parts Mineral Paint with one white lead, thin with Linseed oil: if a lighter color wanted, mix less paint, more lead.  
ROOF:—Five parts of Mineral Paint, one part white Lead: mix with Linseed oil. Put it thick on a tin of as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.

G. T. FORTGE, Superintendent.  
WORKS, North Beach; Office, 318 California st., San Francisco.





A JOURNAL OF MINING, AGRICULTURE, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VI.

SAN FRANCISCO, MONDAY, MARCH 2, 1863.

NO. 18.

## Mining and Scientific Press.

W. B. EWER, EDITOR.

MONDAY EVENING, MARCH 2, 1863.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal. at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, Proprietors.

### Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. Steamrolling and Electrotyping. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

### To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

### Coal Product of the United States for 1860.

Statistics of Coal in the United States during the year ending June 1, 1860, taken from the preliminary report on the eighth census, and revised and corrected for the U. S. Mining and Railroad Register:—

States.	Bituminous.		Anthracite.	
	Bushels.	Value.	Tons.	Value.
Rhode Island	95,000	28,500	1,000	5,000
Pennsylvania	70,334,729	2,978,449	9,415,332	11,869,574
Maryland	14,200,000	464,338		
Ohio	31,639,375	1,653,558		
Indiana	1,643,800	113,568		
Illinois	14,906,643	1,019,751		
Iowa	86,500	6,640		
Missouri	97,000	8,200		
Kentucky	6,732,000	476,800		
Virginia	11,228,675	725,678		
Georgia	48,000	4,800		
Alabama	10,000	1,500		
Tennessee	3,474,100	413,662		
Wash. Ter.	134,350	32,244		
	154,631,172	\$7,927,388	9,416,332	\$11,874,574
Anthracite—tons		9,416,335		\$11,874,574
Bituminous—tons		6,185,246		7,927,388
Aggregate tons		15,601,578		\$19,801,962
Value of coal mined in 1850				7,173,730
Increase, (176 per cent.)				\$12,628,212

In view of the immense amount of Anthracite Coal now annually consumed, the product of the mines of the United States, it is difficult to realize that its utility as an article of fuel was comparatively of so recent discovery. Prior to about 1822, it was known only in Pennsylvania as an incumbrance to the ground, a "black rock," not even fit for building purposes. Governor Findlay is said to have discovered its inflammability by accident, having heaped some of

the "stones" on his fire to ascertain whether they contained any metallic substance. But a great many experiments were tried before it became useful as a colorific agent. An old Quaker is said to have been the first one who originated the plan of burning it in open grates.

The product of Anthracite coals is confined almost exclusively to Pennsylvania. The coals of England are bituminous, and were used for fuel to a limited extent by the Danes and Saxons, many centuries ago. As long ago as 1306, the use of coal was prohibited in London under the supposition that it was dangerous to health, and, indeed, as far back as 1281, coal was an article of trade at Newcastle, Eng.

**COPPER IN NEVADA COUNTY.**—The Zinc House Copper Mines, on the Auburn Road, about which the Nevada Co. papers have had much to say, lately, appear to be progressing finely. From a private letter received yesterday, we are permitted to make the following extracts:

"The Pennsylvania Co. have struck their ledge at 27 feet and the assay of their ore at that depth was 18½ per cent.—every body elated and no one offering to sell. The first North Extension—"The Exchange Co.," are preparing to get to work, in earnest, as the ledge has been struck both sides of them, making it a 'sure thing' that the lead runs through their ground."

A late number of the Grass Valley *National*, speaking of copper ores in that vicinity says:—"Copper miners who have worked in Europe, in Michigan and in other copper fields, assure us that they know of copper veins in the vicinity of Grass Valley, as also in proximity to Nevada, many of which will pay at least thirty per cent. The ore can be extracted at a light expense." The *National* further adds: "The copper mines of this section have one great advantage over those of Lake Superior in this: At the latter place large masses of native copper, frequently weighing one hundred tons, are found, and the expense of extracting them is generally greater than the amount realized for the sale of copper. These immense blocks are chiseled out at an expense of \$10 per foot, the work of course being done by hand. In all the copper ledges yet discovered in Nevada county, as we are informed by prospectors, the native copper found is in small particles, and of course is easily extracted. As the work of descending on copper lodes progresses, and great depths are attained, immense masses of native copper, like those found in the Michigan mines, may be found; but by that period the price of labor will doubtless become reduced, and copper miners can afford to extract metal which at present, labor and transportation rates being high, would prove anything but remunerative."

THE inventor of rebel torpedoes for blowing up vessels is a Massachusetts Yankee by the name of Ivins. He also built their ram Arkansas, the only craft that has troubled us on the Western waters. Sometimes they talk of forming a confederacy and leaving out New England; but even in their deviltry they have to look to Yankee genius. To leave New England out would be like a man's knocking off the top of his head to improve his intellect.

### TREATMENT OF SILVER ORES.

We commence, with the present issue, the republication, from the London *Mining and Smelting Magazine*, of a very interesting treatise on the Mexican method of amalgamating silver ores. This treatise is from the pen of a distinguished scientific man, who has a thorough practical as well as theoretic acquaintance with the subject upon which he writes. It will be continued through some five or six numbers of the Press, and will be found of much value to those of our readers engaged in mining for silver. Those who do not file the paper regularly, should at least preserve the numbers containing these articles. They will be found valuable both for reference and study.

We have examined some very rich specimens of copper ore, at the office of Thos. Ogg Shaw, 422 Montgomery St. They were taken from the Keystone, Kentucky, Union and Webster ledges, Copperopolis. Mr. Shaw has just returned from the Copperopolis region, where he has been engaged in Superintending the putting up Mrs. Hall's Smelting Furnace and Condenser.

SOME of the richest copper ore in the city may be seen at the office of the Miners' Foundry, on First St. It is from a mine recently opened near Lorello, Lower California, under the direction of R. McKee, Esq. We are promised some further facts with regard to this and other mines in that vicinity, which we shall place before our readers as soon as received.

**MAP OF THE HUMBOLDT MINES.**—We understand that a map of the Humboldt River Mines has recently been published in this city. Such a map, if full and correct, must be a valuable addition to our mining geography, at this time. We have not yet seen a copy.

**THE GEOLOGICAL SURVEY.**—The Sacramento correspondent of the *Herald* of Feb. 17th, says:—"The expenditures of the geological survey up to the present time has been \$46,749 77. As the total amount appropriated for the Survey is fifty thousand dollars (\$50,000,) it follows that only about three thousand and two hundred and fifty dollars (\$3,250) remains available for prosecuting the work during the next six months; and that unless some special provision is made by the Legislature it will be stopped entirely in February or March."

**DISCOVERY OF A LEAD AND SILVER MINE IN NEVADA COUNTY.**—A mine containing lead and silver in large quantities, has recently been discovered in Washington township, about twenty miles above Nevada. A piece of the ore assayed by Mr. Ott, yielded 77 per cent. of lead, and silver at the rate of 140 ounces to the ton. The ledge is said to be 14 feet in thickness, and to appearances the ore is of uniform thickness. [*Nevada Democrat*.]

**A WIDE LEDGE.**—The Bacon Ledge, at Gold Hill, N. T., now owned by Fairfax, Doake & Co., has proved itself, by recent explorations, to be eighty feet wide.







## SAN FRANCISCO MINING NOTICES.

### ASSESSMENTS LEVIED.

Texas Co., at a Meeting held Feb. 14, levied an assessment of one dollar per share, payable to the Secretary in Virginia City.

Santa Rosa Co.—February assessment of 20 cents per share now due and payable.

Madison Co.—An assessment, two dollars per share, was levied Feb. 17, payable immediately, at Office, 600 Merchant St.

Union Co.—An assessment of one dollar per share was levied February 16, payable on or before March 25.

Pena Co.—An assessment of \$3 per share was levied Feb. 5, one half payable March 1, balance April 15.

Kosuth Co., Devil's Gate District.—An assessment of 10 cts. per share was levied Feb. 7.

Constitution Company levied an assessment of 25 cts. per Feb. 11, payable immediately.

La Plata Oro Co. levied an assessment of five dollars per share, Feb. 9, payable at Office of the Secretary in Virginia City.

La Plata Co. levied an assessment of 50 cts. per share Feb. 2nd, payable at Office of the President.

Alamo Co. levied an assessment of 50 cts. per share, Feb. 11, payable on or before March 20, at 115 Cal. Street San Francisco, or at office in Carson City.

Tucker Co. levied an assessment of 25 cts. per share, Feb. 11, payable immediately at 608 Merchant St.

Hawley Co. levied an assessment of one dollar per share, on Feb. 9, payable on or before March 12, to Superintendent at the mine, or Secretary at Office.

Slate Range Co. levied an assessment of 50 cts. per share, Feb. 4, payable, March 15.

Assessments upon Mining Stock have been levied as follows:—

Caledonia G. & S. M. Co. levied an assessment, Feb. 1, of 50 cents per share, payable immediately. Sale of delinquent stock will be made March 7th.

Moss G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., or to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 75 cents per share, Jan. 27, payable to the Secretary, at 28, Montgomery St.

Warren G. & S. Mining Co.—An assessment of 75 cts. a share was levied Jan. 26, payable to the Supt., at Virginia City, or to the Sec., 428, Montgomery St.

Warren G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable to the Sec. in this city or to the Supt. at the mine.

El Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to the Supt.

Gaudaloue S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or to the Superintendent at the mine in Aurora, (Esmeralda.)

Dios Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cents per share was levied Jan. 24, payable immediately.

Sonora Mining Co.—An assessment of 25 cents per share was levied Jan. 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Airatic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norcross—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skae, at the Mine, on or before Feb. 25.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount Davidson Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

Hale & Norcross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and U St., Virginia City.

Baltimore American Consolidated.—An assessment of 50 cents per share was levied, Jan. 3.

Savage.—An assessment of \$35 cents per share was levied, Jan. 7.

Hawley.—An assessment of 25 cts. per share was levied Jan. 5, payable in 30 days.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

RED, WHITE AND BLUE G. & S. M. Co. levied an assessment of 25 cts. per share, payable on or before Feb. 1st, office cor. Pine and Montgomery Sts.

Mina Prieta S. M. Co.—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

### COMPANY MEETINGS.

The Cochecho Co. will hold a meeting at No. 606 Montgomery St., on Monday, March 2nd, for the purpose of revising By-Laws, etc.

Chs. Caney Co.—Special meeting of stockholders will be held on Wednesday, March 18, to consider the propriety of an increase of capital stock.

South Utah Co. will hold its annual meeting for election of Trustees, etc., at No. 608 Merchant St., March 20.

Nevada Co. will hold its annual meeting for electing Trustees, etc., at 608 Merchant St., March 20.

Potosi Co.—Annual meeting will be held at Office, in this city, March 3d.

Annie Laurie Co. will hold its annual meeting for election of Trustees, etc., March 19.

Santa Rosa will hold its annual meeting, March 5, at Tucker's Hall.

Desert Co. will hold its annual meeting, March 4.

Daney Co. will hold its annual meeting, March 2.

### ASSESSMENT SALES.

Texas Co. will sell delinquent shares, on the 14 of March.

Meredith Co. will sell delinquent stock, March 2n.

Coso Co. will sell delinquent stock, March 18.

Moray Co. (V. City.—Suits for delinquent assessments will be commenced, March 14.

Michigan Co. (Gold Hill) will commence suits for delinquent assessments, March 16.

Sales of Stock for non-payment of assessments are advertised to be sold as follows:—

North Potosi Mining Co.—Sales delinquent stock will be made March 17.

Peytona G. & S. Mining Co.—Sales of delinquent stock will be made March 1st.

Cole Silver Mining Co.—Sales by Jerome Rice & Co., 327, Montgomery St., San Francisco, on the 25th of February.

Combination G. & S. Mining Co.—Sale by E. S. Spear & Co., at 433 California St., on the 10th day of March next.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

Desert Mining Co.—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

## GENERAL NOTICES.

Jenny Lind (Esmeralda).—Owners of ground in this Co. are requested to call and sign deed of trust at 608 Merchant St.

Mount Hope Co.—Persons claiming stock are requested to present title papers for examination till March 16.

U. S. Mining Co.—All persons claiming stock are requested to present title papers for examination at Nos. 7 & 8 Government House.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

Henry Martin G. & S. M. Co.—"Thomas Wallace, Trustee," gives notice that whereas certain parties illegally claiming to be Trustees of this Company, have changed the name of the Corporation to the North Star G. & S. M. Co., and illegally elected officers for the same, the public are cautioned against such acts, etc.

THE SWEENEY CO., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK CO., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Beach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

### ESMERALDA MINING NOTICES.

THE ZENOBIA LODGE COMPANY, give notice that they claim a superior title to the Johnson Co. claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder,

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1863. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 50 Names can be sent in at different times and from different Post-offices Specimen copies will be sent gratis to any part of the country.

### EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.







## SAN FRANCISCO MINING NOTICES.

### ASSESSMENTS LEVIED.

Texas Co., at a Meeting held Feb. 14, levied an assessment of one dollar per share, payable to the Secretary in Virginia City.

Santa Rosa Co.—February assessment of 20 cents per share now due and payable.

Madison Co.—An assessment, two dollars per share, was levied Feb. 17, payable immediately, at Office, 600 Merchant St.

Union Co.—An assessment of one dollar per share was levied February 16, payable on or before March 25.

Pena Co.—An assessment of \$3 per share was levied Feb. 5, one half payable March 1, balance April 15.

Kossuth Co., Devil's Gate District.—An assessment of 10 cts. per share was levied Feb. 7.

Constitution Company levied an assessment of 25 cts. per Feb. 11, payable immediately.

La Plata Oro Co. levied an assessment of five dollars per share, Feb. 9, payable at Office of the Secretary in Virginia City.

La Plata Co. levied an assessment of 50 cts. per share Feb. 2nd, payable at Office of the President.

Alamo Co. levied an assessment of 50 cts. per share, Feb. 11, payable on or before March 20, at 115 Cal. Street San Francisco, or at office in Carson City.

Tucker Co. levied an assessment of 25 cts. per share, Feb. 11, payable immediately at 608 Merchant St.

Hawley Co. levied an assessment of one dollar per share, on Feb. 9, payable on or before March 12, to Superintendent at the mine, or Secretary at Office.

Slate Range Co. levied an assessment of 50 cts. per share, Feb. 4, payable, March 15.

Assessments upon Mining Stock have been levied as follows:—

Caledonia G. & S. M. Co. levied an assessment, Feb. 1, of 50 cents per share, payable immediately. Sale of delinquent stock will be made March 7th.

Moss G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., or to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 75 cents per share, Jan. 27, payable to the Secretary, at 428, Montgomery St.

Warren G. & S. Mining Co.—An assessment of 75 cts. a share was levied Jan. 26, payable to the Supt., at Virginia City, or to the Sec., 428, Montgomery St.

Warren G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable to the Sec. in this city or to the Supt. at the mine.

El Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to the Supt.

Gaudaloupe S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or to the Superintendent at the mine in Aurora, (Esmeralda.)

Dios Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cents per share was levied Jan. 24, payable immediately.

Sonora Mining Co.—An assessment of 25 cents per share was levied Jan. 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Adriatic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norcross—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skae, at the Mine, on or before Feb. 25.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount Davidson Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

Hale & Norcross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sattou Avenue and C St., Virginia City.

Baltimore America Consolidated.—An assessment of 50 cents per share was levied, Jan. 5.

Savage.—An assessment of \$35 cents pershare was levied, Jan. 7.

Hawley.—An assessment of 25 cts. per share was levied Jan. 5, payable in 30 days.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

RED, WHITE AND BLUE G. & S. M. Co. levied an assessment of 25 cts per share, payable on or before Feb. 1st, office cor. Pine and Montgomery Sts.

Mina Prieta S. M. Co.—An assessment of \$10 per share was levied, Dec. 26, 1862—payable at office, cor. Montgomery and Jackson Sts., on or before Jan. 26, 1863.

### COMPANY MEETINGS.

The Cocheco Co. will hold a meeting at No. 606 Montgomery St., on Monday, March 2nd, for the purpose of revising By-Laws, etc.

Chs. Caney Co.—Special meeting of stockholders will be held on Wednesday, March 18, to consider the propriety of an increase of capital stock.

South Utah Co. will hold its annual meeting for election of Trustees, etc., at No. 608 Merchant St., March 20.

Nevada Co. will hold its annual meeting for electing Trustees, etc., at 608 Merchant St., March 20.

Potosi Co.—Annual meeting will be held at Office, in this city, March 3d.

Annie Laurie Co. will hold its annual meeting for election of Trustees, etc., March 19.

Santa Rosa will hold its annual meeting, March 5, at Tucker's Hall.

Desert Co. will hold its annual meeting, March 4.

Daney Co. will hold its annual meeting, March 2.

### ASSESSMENT SALES.

Texas Co. will sell delinquent shares, on the 14 of March.

Meredith Co. will sell delinquent stock, March 2n.

Coso Co. will sell delinquent stock, March 18.

Moray Co. (V. City.—Suits for delinquent assessments will be commenced, March 14.

Michigan Co. (Gold Hill) will commence suits for delinquent assessments, March 16.

Sales of Stock for non-payment of assessments are advertised to be sold as follows:—

North Potosi Mining Co.—Sales delinquent stock will be made March 17.

Peytona G. & S. Mining Co.—Sales of delinquent stock will be made March 1st.

Cole Silver Mining Co.—Sales by Jerome Rice & Co., 327, Montgomery St., San Francisco, on the 25th of February.

Combination G. & S. Mining Co.—Sale by E. S. Spear & Co., at 433 California St., on the 10th day of March next.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

Desert Mining Co.—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

## GENERAL NOTICES.

Jenny Lind (Esmeralda).—Owners of ground in this Co. are requested to call and sign deed of trust at 608 Merchant St.

Mount Hope Co.—Persons claiming stock are requested to present title papers for examination till March 16.

U. S. Mining Co.—All persons claiming stock are requested to present title papers for examination at Nos. 7 & 8 Government House.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

Henry Martin G. & S. M. Co.—"Thomas Wallace, Trustee," gives notice that whereas certain parties illegally claiming to be Trustees of this Company, have changed the name of the Corporation to the North Star G. & S. M. Co., and illegally elected officers for the same, the public are cautioned against such acts, etc.

THE SWEENEY Co., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Bach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

## ESMERALDA MINING NOTICES.

THE ZENOBIA LODE COMPANY, give notice that they claim a superior title to the Johnson Co., claiming the same ground, so far as said localities conflict. This ground is a portion of that now held by the Company known as the Wide West Company. The notice is signed by A. Waddell, J. C. Dorsey, S. P. Dorsey and James Elder,

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefitted by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 50 Names can be sent in at different times and from different Post-offices Specimen copies will be sent gratis to any part of the country.

### EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



## TO COPPER MINERS AND COPPER PROSPECTORS.

We hear much said, at the present time, among copper miners and prospectors for copper, with regard to "indications" of this mineral. As a general rule our copper miners consider that "gossan" is an infallible indication, and it is furthermore stated that this "gossan" is found in great abundance. The following article, treating upon the Gossan of the Cornwall mines, which, we extract from an English scientific periodical may, perhaps, be of value to some of our California copper miners:—

"This gossan, of which I have examined a great number of samples, from the 'Silver Vein Mine' at Lostwithel, differs notably in colour and general appearance as we pass from one sample to another. Most specimens, however, give a yellowish brown powder, sometimes inclining to red or white. Like all gossans, that from the above named mine, is composed of quartz and oxide of iron, but it is remarkable by the fact that it always contains a certain proportion of silver. Its density varies from 2.66 to 2.75, and its general composition oscillates between the two extreme results I and II.

	I	II
Quartz.....	10	85
Water and Crenate of Ammonia.....	10	3
Oxide of Iron &c.....	80	12
	100	100

The quantity of quartz varies, then, in this gossan from 10 to 85 per cent; but it passes here and there into compact quartz, &c.

I have found that the silver contained in this rock exists in the state of sulphide of silver, combined with sulphide of antimony, copper and iron. The mineral which contains it is fahlerz, or grey copper, and it is dispersed generally throughout the gossan, being often invisible to the naked eye. But in some specimens where the quartz is compact the grey copper shows itself in veins and plates, and where this is the case the quantity of silver is considerable. Regarding the percentage of metallic silver, I chose the following from a considerable number of assays executed in my laboratory during the present year.

I.	II.	III.	IV.
Brown Gossan. 0.038 per ct.	Black Gossan. 0.010 per ct.	Red Gossan. 0.015 per ct.	Yellow Gossan. 0.065 per ct.
V.	VI.	VII.	VIII.
Yellow Gossan. 0.065 per ct.	Yellow Gossan. 0.040 per ct.	Dark Red Gossan. 0.035 per ct.	Yellow Gossan. 0.040 per ct.
IX.	X.	XI.	
Damp Gossan. 0.028 per ct.	Yellowish Brown Gossan. 0.040 per ct.	Wet Gossan. 0.020 per ct.	
XII.			
Compact Quartz, with Grey Copper. 0.185 per ct. also 27½ per cent of Copper.			

These analyses show that most frequently the Cornish gossan gives 0.04 per cent. of metallic silver, or 4 pounds of silver for every 10,000 lbs. of gossan, which is about 14½ oz of silver to every ton of gossan, and that where it passes into compact quartz, showing veins of grey copper, there is a great increase in the proportion of silver and a considerable proportion of copper."

If the gossans of California contain silver, even in small proportions as the above, it would be well for the miners to have all such mineral deposited by itself, as some day it may be worked for silver, to a great profit. If not in our days, perhaps it may in those of our grand children. Consequently, since the saving of it will cost us nothing, and as a probability exists that we may want it ourselves, it is our duty to act with economy.

**TREASURE SHIPMENTS ON THE 21ST ULT.**—The shipment of treasure on the 21st ult was as follows:—

To England.....	\$946,857 38
To New York.....	242,837 66
To other ports.....	43,000 00—\$1,232,745 04
Previously this year.....	8,050,146 64

Total since Jan. 1, 1863.....	\$9,282,891 68
Corresponding period of 1862.....	5,947,088 73

Excess this year.....\$3,335,802 95

**HEAVY MINING TRANSACTION.**—H. F. Wood has disposed of his interest—one-half—in the Independence Quartz Mining Company, at Sierra Buttes, to E. Said, for \$60,000

## THE "KEITH DESULPHURISING PROCESS."

A new process for working gold-bearing rock has recently been introduced into the Pike's Peak quartz mines, which is described as follows in a late number of the *Denver News*:—

We have delayed speaking at length of the new gold saving process, until able to give a definite result. It seems that the first report of its operation was greatly exaggerated in amount, though not much in proportion—though we have talked with those who said they had handled the gold, and voluntarily vouched for the truth of the report as we published it.

The first experiment, as we since learn, was upon one-third of a ton of ore—iron pyrites—from the Gregory lead, which has been paying, by the common process of milling, about one hundred dollars to the ton. The new apparatus was six hours in working it, and obtained one hundred and sixty-seven dollars and fifty cents to the ton. At the conclusion of the experiment it was found necessary to obtain greater power, and operations were stopped to set up a larger steam engine, which will very soon be ready for work.

The *modus operandi*, as explained to us, is as follows:—The ore, as it comes from the mine, is first passed through a "stone-breaker," identical with, or very similar to, the machines used in the States for breaking stone to macadamize roads or streets, which reduces it to pieces about the size of hulled walnuts. It next goes, dry, through a mill similar to the patented quartz crushers known as the "Young America," consisting of a hollow iron cylinder, not unlike, in appearance, a great grindstone, and of great strength, the inside surface of which is corrugated like the grinding surface of a coffee mill or iron corn mill. Passing through the centre of this cylinder is a shaft, to which are attached arms which revolve just clear of the corrugated surface above described. This shaft is made to revolve at a rate of fifteen hundred revolutions a minute. The ore is introduced through a funnel like opening in the side, taken up by the arms of the revolving shaft, and hurled against the rough surface of the cylinder, until reduced to an impalpable powder, when by the draft of the revolving arms it is driven out through a long pipe, into which a flame of intense heat is introduced. In passing through this flame it is desulphurized; the sulphur, arsenic, and other kindred substances which prevent amalgamation, are completely destroyed, and the crushed ore escapes from the furnace ready for amalgamation with quicksilver. To effect this, it is conveyed to a large arasta, which is lined with galvanized plates. Here it first comes in contact with water, and the great revolving wheels stir it until every particle of gold is brought in contact with quicksilver, and is deposited in the form of amalgam. A stream of clear water is then introduced, and all the refuse or tailings is carried off.

Such is the theory and principle of the new plan. It remains yet to be seen whether the first is perfect in practice, and the latter beyond improvement. But even with the present result, it seems destined to work a revolution in gold mining. It has long been the belief of our best miners that our mills had, under the most favorable circumstances, succeeded in saving only from ten to twenty per cent. of the gold contained in the gold handled; an opinion which seems to have been already confirmed by this singular experiment, in which the yield increased more than five fold. We wait anxiously for further tests, and are assured that the next trial will give a still more favorable result.

This "process" is also referred to in a letter from the well known "Dan de Quille," late mining reporter of the *Territorial Enterprise*, which will be found in another column of this paper. It appears that much is expected from it, by the miners about Denver City.

The principle is not a new one. It was employed several years ago at the Llanelly Works, near Swansea, England, to separate sulphur, arsenic and other volatile ingredients from copper ores. After a thorough trial, it was found impracticable, and abandoned. No advantage was gained by this process over the usual reverberatory furnace, either in economy or completeness of desulphurization. So far as we can learn, the "Keith Process," presents no advantages over that employed at Swansea. If flames of such "intense heat," as described in the *News*, are introduced, can they be so regulated as to prevent the melting of the sulphurets, before getting rid of the volatile ingredients which interfere with amalgamation? The *Denver paper* promises to give, in a future number, further results with regard to the working of this process, which, when received, we shall transfer to our columns.

**A PROFITABLE RAILROAD.**—It is said that the net earnings of the Panama railroad, for 1862, have been equal to 30 per cent. on the entire investment.

## MINES AND MINERAL INDICATIONS ALONG THE OVERLAND ROUTE.

"Dan de Quille," who recently left Virginia City, by the Overland Route, for the East, is writing to the *Territorial Enterprise* "Notes of his Trip Across the Continent." The following extracts from his last published letter contain matter of some importance to California miners:—

I am stopping at the Planter's House, the principal hotel of Denver. There must be over a hundred regular boarders at this house and there is a constant stream of transient custom pouring in from the States and the mines. Here we have the same style of dress and the same faces that we meet with in the mining towns of California and Washoe, and those about us talk of ores and mills. A Californian or Washoeite is quite at home here.

## THE BEAVER HEAD MINES.

There will be many persons go from here next month to the Beaver Head mines. All who have been there speak well of the mines, and all are going back. A friend from Salt Lake City, representing a Gentle company of that city and \$30,000, arrived here a day or two since for the purpose of purchasing a mill for the Beaver Head mines. The mill is for one of the veins of quartz I mentioned in my letters from Salt Lake. The gentleman has brought most of his teams and will go up to the mines in a day or two to buy the mill. His company already have agents at work in the Beaver Head country, looking out to secure good leads. Some ten of the heaviest Salt Lake merchants and capitalists are enlisted in this enterprise. They have more exact information in regard to the mineral wealth of the northern country than any parties here or elsewhere, and know just what they are doing.

## MINERAL INDICATIONS ON THE ROUTE.

In regard to mineral indications between here and Salt Lake, I may briefly say that after leaving the Mormon metropolis the first quartz country observed by me was that bordering on Silver Creek. This is a belt of mineral country of forty or fifty miles in width, and I think good veins of silver ores might be found within it. After crossing the Weber we have nothing but sedimentary rocks till reaching the Black Hills. The Rocky mountains, where we crossed them, are purely sedimentary—no sign of any other rocks, or of precious metals. Coal, however, is found in many places, and if looked for, could doubtless be found in nearly every place between Echo canon and the Black Hills. In the Black Hills I saw several veins of quartz, but as night overtook us soon after getting into the range I had but little opportunity for examining the country. I have visited the best mines in the vicinity of Central City, Black Hawk, Nevada City, Eureka and Mountain City; also a number of mills in these places. I secured specimens from many veins which I will test on reaching the States, and mention more particularly in some future letter. I may say, however, that I found a great amount of ore almost precisely similar in appearance to the argentiferous ores of the Humboldt, Reese river, and Galena, (Pleasant Valley or Steamboat) mines. Some of these contain a very considerable amount of silver.

## THE KEITH PROCESS.

I saw, while in the mines, a new process. It is quite interesting and I will send you a full description soon after getting home. I think both the crushing and desulphurizing apparatus will be a good thing in Washoe.

This "process" is fully described in another column of the *Press*.

**ORE TESTS.**—Several inquiries have been made to us of the different chemical tests that will discover traces of silver and copper in the rock. If our friends who are conversant with this matter will forward information respecting such chemical tests to us, we will be happy to give them publicity. [*Amador Ledger*].

Persons interested in the above will find the desired information, and much more in the same connection, all valuable to copper and silver prospectors, in late numbers of this paper. A remittance of six months or a years subscription to the *MINING AND SCIENTIFIC PRESS*, will afford them all the valuable information obtainable from books in relation to prospecting for either silver or copper, and assaying and testing ores of the same. The dissemination of that class of information is the speciality to which this paper is devoted, and no mineral prospector in the silver and copper regions of California can invest \$4 to better advantage than by sending the same to this office and becoming a subscriber and reader of the *PRESS*. We shall be extremely happy to receive the names of all who may favor us with cash patronage. We also pledge ourselves at the expiration of the year to refund to any party double the amount of his subscription, who may honestly think he has not got the worth of his money in valuable information from our columns.



## GENERAL MINING STOCK REPORT.

## REPORT OF SALES

At the San Francisco Mining Stock Board,  
For the week ending February 28, 1883.

Names of Companies.	Total No. Shrs.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$500	—	2800	2825	2850	2900	—
Gould & Curry	4,800	4	500	—	3280	3250	—	—	3000
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	800	—	—	—
Chollar	5,600	4	300	—	585	565	575	575	—
Potosi	2,800	2	400	—	—	150	15	120	—
Hale & Norcross	8,000	2	500	—	700	750	—	—	120
Esmeralda Nevada	3,000	1	300	—	—	68	67½	67½	67½
Dauby	8,000	4	500	—	—	—	250	240	—
Burning Moscow	4,800	2	100	—	102½	100	95	75	80
North Potosi	2,000	1	300	—	28	30	31	35	43
Rogers, F. D.	3,000	1	250	—	12	—	12	12	—
Meredith	7,200	2	125	—	30	—	—	30	—
Charles Caney	1,800	1	30	—	62½	55	45	40	—
Sacramento	1,800	1	500	—	65	—	90	65	60
Lucero	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	—	—	—	—	—	—
Iowa	—	—	—	—	120	115	—	120	110
El Dorado	—	—	—	—	—	40	—	—	—
Norton	1,000	1	—	—	34	26	21	24	25
La Crosse	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	—	—	—	45	43	—
Cedar Hill Tunnel	—	—	—	—	4 80	—	—	4 ½	4 ½
Mount Davidson	10,000	3	200	—	—	5	5 ½	7	6
<b>ESMERALDA STOCKS.</b>									
Wide West	2,800	4	80	—	345	345	345	350	355
Antelope	1,200	1	500	—	310	330	345	360	400
Esmeralda	1,800	1	1000	—	47	45	53	48	50
Real del Monte	4,400	1	400	—	41	44	54 ½	70	81
Etna	1,200	1	100	—	10	—	10	10	—
Utah	—	—	—	—	110	117 ½	100	95	92 ½
Silver Hill	3,000	1	—	—	35	35	38	36	45
Nevada	—	—	—	—	35	—	105	—	100
<b>COPPER STOCKS.</b>									
Josephine	—	—	—	—	21	21 ½	24 ½	23 ½	22 ½
Chollar	—	—	—	—	18	20	—	20	20
Willow Springs	—	—	—	—	28	30	—	30	31
<b>MEXICAN MINES.</b>									
Mina Prieta	—	—	—	—	—	—	—	140	—
Dios Padre	—	—	—	—	50	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	—	—	—	—	35	—	32	—	—

## STOCK REMARKS.

SAN FRANCISCO, March 2nd 1883.

The activity in stocks still continues, and another week has closed with generally advanced rates. We quote a much wider range of stocks to-day, than on any previous occasion. It will be noticed by our Virginia City report, that San Francisco capital is not altogether confined to "home transactions," but also nets a conspicuous part in transmontane stock operations. The Territorial Enterprise says if San Francisco capital does not regulate the price of Virginia City stocks, it, to a great measure, creates a demand for them there.

Ophir has advanced \$100 during the week and has been considerably dealt in. \$3000 is offered on 60 days, without sellers. \$3000 cash would probably bring them out.

Gould & Curry have declared a dividend, for February, of \$100 per foot, carrying over a surplus of \$1000 to March. The stock appears to be quiet—one sale, only, being quoted this week. This Company's mill is now running 40 stamps, and turning out, according to the Virginia "Union," a ton and a-half of amalgam, daily! A year's dividend for a single foot of this Company was recently sold for \$960. The Company now have on hand \$70,000.

Mount Davidson still continues to be actively dealt in at advanced rates. The mine is now under the management of Dr. James Delevan, an experienced miner. The Tunnel is now in about 900 feet; 491 feet from the entrance a side drift is run for the Florentine vein; 118 feet further on is another for the supposed Gould & Curry vein, while still another 131 feet beyond, is running for the Octavia vein. The work is progressing day and night. Important developments are confidently expected at an early day.

Burning Moscow still continues active notwithstanding the failure of the jury to agree, in its suit with the Matterson. The announcement caused a decline of about 20 per cent. in its stock, at which rates buyers were plenty.

Sacramento, Charles Caney, and Norton have slightly declined. The Savage, Chollar, Hale & Norcross, and Potosi, are favorites among the 2nd and 3d class stocks.

ESMERALDA.—A very large business still continues to be done in Esmeralda stocks. These stocks are almost universally improving in this market. A large number of new companies have recently been incorporated to work mines now opening in that district.

One sixteenth share in the Sierra Batos Quartz company changed hands last week for \$20,000. This mine will pay steadily 4 per cent. a month on \$300,000.

One half of the Independence Q. M. Co. changed hands a few since for \$60,000.

## TRANSACTIONS IN SHARES, FOR THE WEEK.

## NEVADA TERRITORY.

Ophir—12 at \$2,840; 12 at 2,850; 60 at 2,900, 30 ds; 18 at 2,800; 60 at 2,975, 20 ds.

Gould and Curry—20 at 3,350.

Chollar—105 at \$550 @ \$610.

Sierra Nevada—102 at \$70 @ \$75.

Burning Moscow—10 at \$105; 10 at 110, 30 ds.; 40 at 110, 30 ds; 20 at 75, 20 at 100; 40 at 100; 80 at 95; 20 at 92½; 20 at 102½, 30 ds.; 35 at 110 30 ds.

Potosi—145 at \$155 @ \$155.

North Potosi—5 at \$40; 50 at 31; 10 at 30; 20 at 43.

Sacramento—21 at \$70; 80 at 60 @ \$72.

Chu's Caney—10 at \$55; 5 at 52½; 10 at 52½.

Savage—5 at \$1,400.

Rogers, F. D.—27 at 12 assessments unpaid.

Yellow Jacket—2 at \$250.

Iowa—10 at \$110.

Norton—5 at \$22; 15 at 35; 30 at 35; 10 at 34; 40 at 30

Cedar Hill Tunnel Co.—51 at \$5.

Mount Davidson—73 at \$7; 12 at 5½; 25 at 5; 50 at 6.

Burnside—10 at \$40; 10 at 36; 50 at 40, b'r 30 ds.; 10 at

45; 25 at 43; 30 at 45; 10 at 44; 10 at 42; 30 at 43; 30 at

43; 20 at 42½; 10 at 44; 20 at 40. 30 at 40.

Hale & Norcross—60 at \$700 @ \$750.

Madison—30 at \$30; 10 at 40; 20 at 35; 12 at 35.

Nevada—5 at \$115; 10 at 115.

Recorder—20 at \$22½; 20 at 20; 30 at 22½; 20 at 20.

Zouave—56 at \$18; 15 at 14½; 33 at 17½.

Hazel Green—10 at \$4; 10 at 4½.

Adriatic—230 at \$5. Rhode's Digings—15 at 40.

## ESMERALDA DISTRICT.

Wide West—5 at \$350; 4 at 350, 2 at 360; 10 at 350; 6

at 365; 2 at 347½; 6 at 350.

Antelope—10 at \$310; 3 at 320; 10 at 400, b'r 30 ds; 10

at 400; 10 at 400.

Esmeralda—10 at \$54; 8 at 54; 20 at 50; 15 at 50.

Real del Monte—7 at \$65; 19 at 70; 5 at 40; 10 at 45;

10 at 54½; 26 at 80.

Etna—140 at \$9 @ \$12. Lord Byron 25 at \$12½.

Coso—20 at \$20. Hawley 30 at \$30.

Utah—10 at \$109; 10 at 108; 10 at \$115; 10 at 117.

Silver Hill—25 at \$35; 35 at 36 25 at 45; 25 at 46; 5 at 46

Josephine—10 at \$21; 30 at 21½; 15 at 22; 15 at 23;

10 at 24; 5 at 25; 10 at 24½; 40 at 24; 25 at 21½.

Bamboo—10 at \$30; 10 at 52½; 5 at 80; 5 at 70.

Willow Springs—10 at \$32; 10 at 31.

Gov. Nye—10 at 10; 20 at 9; 5 at 9; 25 at 9; 70 at 10;

60 at 9½; 10 at 9½.

Cole—25 at \$25; 17 at 25.

Mina Prieta—20 at \$150.

Bollion, Van Horn District—100 at \$1½.

Union, Russ District—475 at \$3 to \$4½.

## COPPER STOCKS.

Napoleon Copper Co.—50 at \$32.

## VIRGINIA CITY STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Ask'd		Bid	Ask'd
Ashland	\$ 9	—	Industrious	\$ 5	—
Adriatic	6	—	La Crosse	25	—
Alchison	150	—	Laboring	11	—
American Basin Co.	20	—	McBee	25	—
Belvidere	10	—	Milton	100	—
Ballie	20	—	Mary Ann	25	—
Birdsall	20	—	Monterey Co. (Spring Val)	20	—
Bullion (consolidated)	45	50	Monarch	20	—
Burnside	45	50	Madison	—	—
Burning Moscow	75	80	Mohogen	6	—
Beach & Paxton	50	50	North American	5	—
Baltimore American	25	—	Orean	5	—
Bald Eagle	2	—	Oscoda	10	—
Bloomington	6	—	Pride of Washoe	15	—
Cedar Hill Tunnel	5	—	Peytona	—	—
Caledonia	10	—	Philadelphia	2	—
Cornet (Simpson's Park)	50	—	Recorder	—	—
Cole	4	—	Santa Rita	35	—
Consolidated Cedar Hill	4	—	Santa Fe	12½	—
Dargan	10	—	Summit	5	—
Dayton Company	10	—	Swezey	—	—
Decatur	5	—	St. George	4	—
Dunn	10	—	Sinaloa	8	—
Empire	5	—	Sierra Nevada	70	75
Esmeralda	55	55	Sierra	22½	—
El Dorado	50	—	Sigal	65	77
Eureka	25	—	Sierra	2	—
Evering Star, Argentine Dist	30	—	Sigal	8	10
Empire Co. (Spring Val.)	25	—	U. S. Mining Company	5	—
Governor Nye	6	—	U. S. Tunnel	15	—
Golden Gate	5	—	Uncle Sam	3	—
Grass Valley	11	—	Utah	40	—
Golden Era	10	—	Virginia	5	—
Golden Eagle	10	—	Washington Ledger	5	—
Hazel Green	5	—	York	4	—
Harrison Co., Geller Ledge	4	—	Yellow Jacket	250	250
Hawkeye	20	—	Zouave	15	—
Irving	15	—			

## WASHOE STOCK REMARKS.

[Compiled from the Daily Territorial Enterprise.]

TUESDAY EVENING, February 17th.

The wires between Virginia City and San Francisco have been down to-day, and, as a consequence, transactions have been rather limited. The enquiry of "What are you paying for — to-day?" has been answered by the brokers with "The wires are down." If San Francisco capital does not regulate the price of Virginia City stocks, it in a great measure creates the demand. Burnside, which gave such promise of fluctuation yesterday, has been ominously quiet to-day. Holders are afraid of selling at a price too low, and brokers, in the absence of advice from the Bay, are not disposed to risk much of an advance. It is sparingly offered, however, at \$60, without takers. There continues to be some dealing in Yellow Jacket at \$175 to \$200, and in the Union at \$14 @ \$15. The case of these two companies will scarcely be reached this time of Court. There is a lull in Zouave, but none can be had for less than \$10. An advance is anticipated by holders. Bullion is in request, and large quantities might be disposed of at our quotations of yesterday. We quote Yellow Jacket at \$175 to \$200; Union at \$15; Sacramento \$60; El Dorado \$50; Birdsall \$20; Zouave \$10 @ \$12; Dunn 6½ @ \$7; Oriental \$4 @ \$5; Hazel Green \$4 @ \$5; Belvidere \$3 @ \$10; Beach & Paxton \$35 @ \$40; Pride of Washoe \$15 @ \$20; North American \$1 @ \$5.

WEDNESDAY EVENING, February 18th.

Something substantial has been done in stocks to-day. Many of the la

gest transactions, however are not made public. There has been much activity in Burnside. San Francisco operators seem suspicious and touch sparingly. The highest offer to-day has been \$60. There is little in market, however at these figures. There is a large demand for Zouave at \$10 and 12 has been offered. Moscow has been in request at \$70 @ 75, but as most of the stock is held below, it is obtained here with difficulty. There has been some dealing in Bullion at our quotations of yesterday. Yellow Jacket is in demand at \$175—200 is asked. Union is saleable at \$13 @ 15. Winn, the principal owner in the Irving, is exhibiting very fair looking ore from that claim. It is limited in quantity, however. With the exceptions noted, our quotations remain at our figures of yesterday.

THURSDAY EVENING, February 19th.

This has been one of the most stormy and disagreeable days of the season, but trade has been quite active nevertheless. After slumbering for six months, the Cole suddenly awoke to notice, to-day, and a number of transfers were made at \$20. The resuscitation seems to be owing to San Francisco operators. Burnside has been inactive and is evidently on the decline. There have been no offers for it to-day. Texas is advancing at a moderate pace, and selling at \$5 @ 5½, assessments paid. Bullion is in continued request, and 50 feet changed hands to-day at private rates. In Zouave there is still some dealing at \$11 @ 12. This stock can readily be sold at these figures. Oriental is meeting with some favor, and holders are expecting to cut the ledge again in a few days. It is still in the market, however, at \$4 @ 5. There is enquiry for Sacramento at San Francisco rates, but little or none is offering. Fifteen feet Union sold at \$15; 5 feet Birdsall sold at \$20; 20 feet Texas at \$5; 160 feet Cole at \$20; 10 feet Pride of Washoe at \$15; 25 feet Sinaloa, Gold Hill, at 8. This latter Company has recently struck what is supposed to be the south extension of the Crown Point Ledge, and holders are looking for large figures.

FRIDAY EVENING, February 20th.

There has been considerable life in stocks to-day, and the promise for to-morrow is better. The demand for most stocks of accepted value exceeds the supply. Such a condition of the market is of course exceedingly gratifying to holders, and speaks well for the estimation in which our mines are held. Burnside has been inactive. Operators are careful, and holders nervous. Fifty dollars is the most that has been offered, and this sparingly. But little has changed hands. The Milton excitement seems to have subsided, and operations in the stock have apparently ceased. We cannot pretend to quote the price. Bullion is in request at \$30, but little can be obtained at these figures. The Pride of Washoe is advancing, and cannot be quoted at less than \$25. We have before us an assay of ore from this claim which shows \$216 to the ton—\$171 in silver and \$45 in gold. Sacramento is in demand at \$60 @ 65—about the Bay rates. It is held firmly at higher figures. Beach and Paxton is in request at \$40 @ 60, but none is to be had at these rates. This is a small claim of 238 feet, and holders are looking for a wild advance. Norton is inquired for, as well as its extension, the Recorder. Texas can be sold in small lots at \$7, assessments paid. Within the past ten days this stock has advanced from \$1 50 to \$7 per share. Fifteen dollars is offered for Zouave, to fill orders from below, and there is some inquiry for Gov. Nye at \$5 to 6. There is some talk of a strike, or an approaching strike, at Flowery Hill, but we can trace the report to nothing reliable. The Santa Rita Company struck the ledge in their tunnel in Spanish Ravine, north of the Cole Company, this morning. Five specimens of silver were taken out.

SATURDAY EVENING, FEB. 21.

Stock transactions to-day have been quite unimportant. Burnside is quiet—very quiet—with no bids of moment. It is offered in small lots at \$45 @ 50, without takers. Bullion is exceedingly active. Fifty feet sold this morning at \$30, and in the afternoon \$35 was freely offered for large and small lots, without accommodation. This advance is owing to no excitement. The location and proximity to the ledge seem to be the basis of the animation. Texas is still in demand at \$7 @ 8; and \$10 it is reported has been offered. Sacramento continues in request at \$60 to 65, with little offering. There is less inquiry for Zouave, but the stock is generally held firmly for an advance. It may be quoted at \$15. There is a light demand for Cole at \$20. No transactions in this stock are reported to-day.

There were sold: Hawthorn, \$1 at \$5; Hazel Green, \$1 at \$5; Pride of Washoe \$15 @ \$5 @ 5; Birdsall, \$19 @ \$20; El Dorado, \$50; Oriental, \$10 @ \$10; Texas, \$1 @ \$1; Union, \$1 @ \$1; Sierra Nevada, \$1 @ \$1; Sierra, \$1 @ \$1; Sigal, \$1 @ \$1; U. S. Mining Company, \$1 @ \$1; U. S. Tunnel, \$1 @ \$1; Uncle Sam, \$1 @ \$1; Utah, \$1 @ \$1; Virginia, \$1 @ \$1; Washington Ledger, \$1 @ \$1; York, \$1 @ \$1; Yellow Jacket, \$1 @ \$1; Zouave, \$1 @ \$1.

## ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Ask'd		Bid	Ask'd
--	------	-------	--	-----	-------



From our Edition of Feb. 16th.

### MINING EDUCATION.

In our last issue we referred to some of the disadvantages under which the California miners, as a class, labored by reason of the lack of a proper Mining Education. We also adverted to the fact that the popular antipathy against the application of science to mining, which was so prevalent among California miners, six or eight years since, has lately been pretty much laid aside. It is now very generally conceded that an empirical knowledge of mining is not the way to succeed in that difficult and uncertain branch of industry. The occurrences connected with the discovery and development of our silver and copper mines have produced such a change in public sentiment that, at the present day, it is rare to find a man who will openly avow, even if he secretly entertains, a belief in a necessary antagonism between theory and practice. Practice and science have now joined hands in the mines, and the time has passed when the former will venture "to go it blind" in the vain confidence of shallow empiricism, unaided by science.

The attainment of a passable mining education, when proper facilities and instructors are at hand, is not a work of so much time and study as many suppose. The difficulties and mysteries involved in becoming an expert in planning and working a mine, and in acquiring a practical knowledge of their geological and mineralogical characteristics, are no greater than are to be met with in many other subjects in the usual programme of practical and theoretic education. Experience is the foundation of success in all human undertakings; but the only value of experience is the facility which it affords us to deduce from previous results, a knowledge by which to overcome new or greater difficulties. This is identical with the inductive process of the man of science. But he that confines himself to his own limited experience, shuts his eyes against the lights of science; and, in despising the experience of others, he will soon find himself buried in the darkness of empiricism, while those who have entrusted him with their business will surely behold their undertakings enveloped in a labyrinth of difficulties, which must sooner or later result in common and promiscuous ruin.

A large mine is a complicated machine, and we might with quite as much propriety place a ploughman, with no mechanical experience, whatever, in charge of a double cylinder printing press, as to place a man, whose experience in mining is confined to what he has done himself, in charge of a mining operation of any magnitude. The art of mining involves a general knowledge of mechanics, surveying, mineralogy and geology. To understand working a mine—boring, sinking, pumping, winding, stopeing, hauling and ventilation—a tolerably correct knowledge of every leading principle in mechanics is needed. Without such knowledge the miner will find it impossible to decide upon the most economical means and arrangements for transport either in the mine or on the surface, the kind and capacity of engines needed, or the character and class of machinery best calculated to perform the work before him. Laying out the work properly, each part with reference to another, requires a knowledge of surveying. To ascertain the proper place to sink shafts, involving calculations of the dip and strike of strata, probability of water, faults, &c., implies a knowledge of geology: while by the aid of mineralogy only, can he determine the nature and value of the minerals upon which he is working, or which may chance to come in his way. On a correct conclusion with regard to each and all these points depends the success of the undertaking. The employment of experienced men, with liberal salaries, to superintend works of this description may safely be predicted as uniformly resulting in larger dividends to stockholders, and increased safety to mine and workmen. Experience, coupled with a proper application of science, is the only foundation of fitness for the position of Mining Superintendent. The lack of these requisites has cost English adventurers millions of pounds sterling—sometimes in the faulty opening of a mine, at others in the lack of mineralogical knowledge for determining the value and character of the mineral when found. We gave several instances of the latter in our last issue, we might multiply instances of the former *ad infinitum*.

It is to the lack of this latter information that we must attribute the delay in the development of the silver and copper mines of the State, a full decade beyond the time when

their existence should have been known as the result of actual explorations.

There is but one way to remedy the evils here passed in review and provide our State with a competent corps of mining engineers and superintendents—*A School of Mines must be established under the patronage and partial control of the State.* An institution of this kind is absolutely necessary to a proper development of our resources. We need it as a collector and conservator of mining knowledge past and progressive. We need it as an institution for the general diffusion of information in this branch of industrial science. We need it as a place where the working miner, the proprietor and the engineer may be drilled and schooled in the art of mining, in all its bearings. Such schools have long been in existence in nearly every country in Europe, where they are fostered with the greatest care by the different governments. We shall endanger our reputation as a progressive people if we much longer delay a movement in this direction. The losses of property and misdirected outlay of capital already scored up, (to say nothing of the sad loss of life,) and laid at the door of inexperience, would have liberally endowed half a score of such schools.

Our State Geologist, in his address before the Legislature two years ago, advised the early establishment of such a school. We have now a Legislative Committee on Mining. Is there any more important matter which can come before them than that which we are now discussing? Have they ever thought seriously upon it? If so, or if not, heretofore, why would it not be well, at the present time, to prepare the general outlines of a plan for such an institution, and let it go before the people, with a legislative endorsement, for future consideration.

Legislators are quite too prone to think that when they have enacted laws for the creation and collection of revenue, for the collection of debts and the punishment of crime, and, perchance, performed the herculean task of electing a United States Senator, they have fully discharged their legislative duties. They forget that there are other equally, if not more important duties to perform, in providing the means for properly educating the adult industrial class of society. This is universally done in Europe, at least to an extent sufficient to provide competent directors for all the great industrial interests of the land. We have neither time nor space to say more under this head than what will be merely suggestive; but we hold that it is quite time our Legislators should take this matter under consideration, and initiate some steps toward an ultimate accomplishment of the end in view. The present "let alone" policy must inevitably continue to result in serious losses, both to individuals and the State, and we shall be fortunate indeed, if our chief industry is not thereby soon completely buried in the darkness of that empiricism in which it is already so sadly floundering.

From our Edition of Feb. 16th.

### MINING INCORPORATIONS.

Notwithstanding the attempts at editorial pleasantry that are so frequently indulged in by our contemporaries, at the lengthening list of mining Companies, and the cumulative exhibits, of the many millions of capital which they represent, "on paper," each passing month brings additional evidence that this wealth is far from imaginary. The constantly increasing values of the figures which appear in our weekly stock reports, appended to the leading mines on the Eastern Slope, are stubborn facts, which must soon make plain to the most unbelieving that the footings of the aggregate "capital," placed as a value upon the mines now in progress of development, are not much too high. Imagination can scarcely form any adequate conception of the mineral wealth, which is soon to be developed on the Eastern Slope, and throughout the entire length and breadth of the "Great Basin," whose Western and Eastern rims are formed by the rocky slopes of the Sierra Nevada and Rocky Mountains.

Several of these earliest formed Companies, which, in the estimation of the great mass of people at that time, fixed their capital stock at an almost fabulous figure, have already reached the immediate vicinity of their incorporate value and their stock will no doubt, ere long, be quoted at a handsome percentage "above par." Indeed, one of them has already exceeded its par value and is quoted to day at more than 60 per cent. advance.

Numerous others, second and third class mines, are making such favorable developments, at the present time, as give good earnest of an early approximation of their stock to par value.

A few years since scarcely a merchant in San Francisco could be induced to invest a dollar in any mining enterprise. To do so was to lose *caste*, and endanger one's credit "on change." Even our foundrymen, could not be induced to invest a dollar, in a business to which they were then, as now, indebted for almost their entire business. Now things are entirely changed, and one can scarcely find a man in San Francisco who does not own "feet" in some mining claim.

What matter is it if a large portion of these projected companies should fail? All, or even a majority cannot hope to succeed. A sufficient number, however, will prove so remunerative as to return a handsome aggregate percentage on all the money invested. Hitherto the chief burden and losses attendant upon opening up the mines of California, have fallen upon the mining community almost exclusively, while the commercial and agricultural interests have been greatly profited at no risk. It is one of the conditions of mining, everywhere, that many individual losses must occur, which, however, are always made good in the general aggregate of profits; and it is creditable to the mercantile interest of this city that it has now taken hold of the matter of developing the mines of the State and is freely pouring out its capital for that purpose. The aggregate of these investments cannot fail to be highly remunerative, and will reward the losers even, in the increased business which they will create and concentrate in San Francisco. This city owes its very existence to the mines, and it betrays a feeling of selfishness in any man of means, to refuse to do his part in developing the interest upon which its prosperity depends. Every new Mining Company, whose organization is announced, is evidence that a new mine has been discovered, and that somebody intends to spend a little money for its development. Every such item is a matter of encouragement, and indicative that the great interest of the State is progressing. We trust the day is far distant when we shall fail to find in each morning's paper the announcement that some new mining organization has been effected during the previous day.

### SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.



**LOWER CALIFORNIA****Colonization and Mining Company.**

THE AGENTS SENT TO MEXICO BY the above Company having returned per steamer Oregon; after having secured a tract of upwards of

**125,000 Acres**  
OF RICH AGRICULTURAL LAND,  
and a valuable silver Mine.

The Company is now prepared to furnish exact information to Colonists who have already engaged, or those about to engage in this

**SPLENDID ENTERPRISE.**

It proposes to send a vessel about the first of March next, and there being but a limited number of shares

**NO TIME SHOULD BE LOST BY COLONISTS.**

**Farmers Miners and Mechanics,**

With families are particularly invited by the authorities of the Territory. The land selected, in point of fertility of soil, is not excelled on the Continent. The climate is unsurpassed in the world. The richest Silver Mines known to exist in the Territory are in the immediate vicinity and bordering on the agricultural lands of the Colony.

N. B. Bear in mind that a share costs, at present, only \$200, which entitles the holder to free transportation for self, family, and articles of personal use and an equal share in the land, the Company's Silver Mine, etc. the whole enterprise, being for the mutual benefit of members only.

Full information can be had, and Mineral and Cotton Specimens seen, by applying at the Office of the Company, North-west corner of Clay and Front Street.

**BOARD OF TRUSTEES.**

A. G. RANDALL, President.  
CAPT. JOHN H. BELL, V. President.  
O. F. GEHRIGKE, Secretary.

Trustees.—L. F. LOVELAND, ISAAC CARON, M. D. MATTHEWSON, H. C. PATRIDGE, I. ROWELL, M. D.  
Committee on Survey.—E. RICHARDS, Special Agent;  
Capt. R. C. ANDREWS, Surveyor.

**LEANDER RANSOM,**  
**Civil Engineer**  
**AND**  
**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

**ALSO**

**STATE LOCATING AGENT.**

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL LANDS,**

**At the low price of \$1.25 per Acre.**

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oc7-3m

**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

**CROCKERY,**

**GLASS WARE,**

**FRENCH CHINA,**

**Coal Oil Lamps, Table Cutlery,**

**CLOCKS,**

**Silver Plated and Britannia Ware,**

**ETC., ETC., ETC.**

**NO. 516 SANSOME STREET,**

[CORNER OF MERCHANT,]

**Attention! Attention!**

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mount Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency. The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,

No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office. no 13 6mo

**A. ROMAN & Co.,**

WHOLESALE AND RETAIL

**Book Establishment,**

**417 and 419 Montgomery street,**  
**SAN FRANCISCO.**

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or a Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Piggott on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman. Gold Mining and Assaying; by Phelps.

Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines. Weisbach's Mechanics of Machinery and Engineering. Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis. Together with many other works in this and similar lines

Books imported to order on short notice. oc7

**A. ROMAN & Co.**

**417 & 419 Montgomery Street.**

**READ THIS!**

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences. [Evening Bulletin, Aug. 4.]

**THEN THIS!****Comet Illuminating Oil!**

Manufactured expressly for Stanford Bro.

THIS POPULAR

**Brand of Kerosene**

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

**BEST FAMILY OIL IN THE MARKET.**

**STANFORD BROTHERS,**

Nos. 121, 123 and 125 California street.

**Zur Beachtung für Erfinder.**

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Stützen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

**Gird's Budding Knife.**

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentee,) San Francisco

sepl-3m

**The Occidental Hotel**

IS NOW

**Open for the Reception of Guests.**

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**

AND A LARGE

**CABINET FOR MINERALS;**

ALSO

**A Branch Telegraph Office,**

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

**MUSIC! MUSIC!! MUSIC!!!**

**A. KOHLER,**

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments & Musical Merchandise

**SHEET MUSIC & MUSICAL BOOKS.**

**GENUINE ROMAN STRINGS, &c.,**

Light's New Patent Insulated Iron Frame

is put into all of

**LIGHTS & BRADBURY'S OVERSTRUNG PIANOS.**

Wherever these instruments are known they

**RANK AS THE FIRST AND BEST**

in tone, delicacy of touch and durability.

All the leading Musicians of the country have

testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

**MELODEONS AND HARMONIUMS,**

FROM THE CELEBRATED MANUFACTORY OF

**MASON & HAMLIN,**

Warranted superior to all others.

Send for a catalogue and Price list.

oc7

A. KOHLER, Agent.

**To Mill Owners.**

WANTED, by a person fully competent to the position, a situation as Mining Superintendent in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assorter of Copper Ore. He can give ample testimonies as to his capacity for the position he seeks.

Apply at this Office.

**W. T. & J. GARRATT,**

**City Brass and Bell Founders**

Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."**

**SQUARZA'S PUNCH.**

**FIRST PREMIUM**

AT THE SACRAMENTO AGRICULTURAL STATE FAIR

FOR 1862.

**ALSO; FIRST PREMIUM**

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

**No. 44 Leidsdorff street,**

Opposite the What Cheer House, San Francisco.

**LATEST IMPROVEMENT**

**in Ladies' Buckles.**

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERICK REICHEL, Manufacturing Jeweler, 620 Merchant street, San Francisco.

**GREAT REDUCTION**

IN PRICES.

**STANFORD BROTHERS,**

**121, 123 and 125 California Street,**

*Keep the Largest Stock of all Kinds of*

**Lamp Stock**

**And will Sell Cheaper than any other House in this State**

**LAMPS, CHIMNEYS,**

**WICKS, CAMPERNE,**

**BURNING FLUID,**

**ALCOHOL, COAL OIL,**

**TURPENTINE, KEROSENE OIL,**

**COMET ILLUMINATING OIL,**

**SPERM OIL, LARD OIL,**

**MACHINERY OIL,**

**RAPE SEED OIL,**

**CHINA NUT OIL,**

**POLAR OIL,**

**LINSEED OIL, Raw and Boiled,**

**SHARK'S OIL,**

**NEAT'S FOOT OIL,**

**TANNERS OIL, ETC.**

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. apl6ff

**50 lbs. MARINE AND****Fire-Proof Paint,**

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from Ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mixed with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chaudlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUE, Superintendent.

**WORKS, North Beach; Office, 318 California st., San Francisco.**

**WRIGHT'S PICKS.**

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street,

Opposite Battery, San Francisco.

**REMOVAL.**

OFFICE OF THE PACIFIC METALLURGICAL Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased. COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent, 318 California street, near Sansome, up stairs.



## SPECIAL NOTICE.

**JEWEL G. & S. M. CO.** The Annual Meeting of the Jewel G. and S. M. Co. will be held at the office of the Company, 612 Merchant street, on **TUESDAY, March 3, 1863**, at 11 o'clock, A. M. By order,  
J. ARMSTRONG, Sec.

## Instruction in Assaying, Etc.]

A SCIENTIFIC AND PRACTICAL CHEMIST NOT HAVING the whole of his time occupied with his present business, is prepared to teach the various branches of Chemistry and Metallurgy, is willing to teach the method of assaying Gold, Silver and Copper, alone, or to teach the regular systematic course of Qualitative or Quantitative Chemistry.

Address, T. P.  
Post Office, Box No. 167.

**WANTED** by an Intelligent and active young man a situation by which he may obtain an honest livelihood. He is about 18 years of age, and is a good penman. Enquire at this office.

## Miner's Foundry

—AND—

## MACHINE WORKS,

First St., between Howard & Folsom,  
SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miner's Foundry and Machine Works, as:

STEAM ENGINES AND BOILERS, FLOUR, SAW AND QUARTZ MILL MACHINERY, MINING PUMPS, AMALGAMATORS, RETORTS, ETC., ETC.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING.

San Francisco, February 23, 1863.

## VULCAN IRON WORKS CO.

P. TORQUET.....MANAGER.

R. IVERS. C. R. STEIGER. S. AITKEN.

## Steam Engine Builders,

Boiler Makers, Iron Founders and General Engineers,

Nos. 137 & 139 FIRST STREET, ---- SAN FRANCISCO.

STEAMBOAT MACHINERY built and repaired; also Saw, Flour and Quartz Mills, Pumping and Mining Machinery, etc., etc., etc., etc.

Proprietors of Morse's Patent Fire Grates, JOURNAL, FURNACE and other Turbine Water Wheels, with latest improvements.

## FREDERICK KESMODEL,

Cutler & Surgical Instrument Maker

817 KEARNY STREET,

Between Jackson and Washington streets,  
SAN FRANCISCO,

RECEIVED a diploma at the Fair of the Mechanics' Institute, September, 1858, also in Sacramento in 1861 for California made Cutlery.

The attention of those afflicted with HERNIA, or Rupure, or any one interested, is called to his new method of fitting and adapting Trusses to the different case. It is a well known fact that there has as yet been no system of fitting Trusses. There are many different styles which have proven good in many cases, but they are uncertain and cannot be relied on, and in severe cases are altogether useless. The following are some of the advantages I claim for these Trusses above any and all others: First—The Pad is formed on the parts to be compressed by taking a plaster cast. Second—Having a correct model, it enables me to make the Pad of any desirable material, such as hair, ivory, etc. Third—The Pad is so adjusted to the spring that no movement of the body will move or displace it. There are many other advantages. Examine and judge for yourselves.  
FREDERICK KESMODEL,  
Inventor and Patentee

ap8 tf

PALMER, HANSCOMB & CO.,  
GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco.

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

## To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOMB & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms, for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

## FULTON FOUNDRY &amp; IRON WORKS

HINCKLEY & CO.,

MANUFACTURERS OF

## Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,

FIRST STREET,

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.

PATTERN MAKING in all its various forms. Prices low.

D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

## TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will

Save in Transportation, Material and Labor, from

25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan19-1f

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## SQUARZA'S PUNCH.

HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff st., near Sacramento.

Branch at 406 Montgomery street. my30

## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of February, 1863.

March 2nd, - - - - Steamer Golden Age.

March 11th, - - - - - Steamer Sonora.

March 21st, - - - - Steamer Constitution.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

Je4 Corner of Sacramento and Leidesdorff sts.

## PEOPLE'S

## Steamship Line!

CONNECTING

CALIFORNIA AND NEW YORK,  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

MOSES TAYLOR,

E. HOWES ..... COMMANDER,

Will be dispatched for

San Juan del Sur,

From Mission street Wharf,

Punctually at 9 o'clock, A. M., on

WEDNESDAY, - - - MARCH 11, 1863.

Connecting at GREYTOWN with the Splendid Steamship

ILLINOIS ..... 2500 Tons.

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers

For further information apply to

I. K. ROBERTS, Agent,

a20 No. 407 Washington Street, opp. Post Office.

## DONAHUE'S

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES,

SAW AND GRIST Mill Machinery, Boilers,

Quartz Stampers, Amalgamators, etc., etc., at reduced

prices. Have now the largest and best assortment of

Gear and Machinery Patterns in the State, a list of

which will be forwarded to anyone desiring it, free of cost.

PETER DONAHUE.

## Holiday Presents!

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

BRAVERMAN & LEVY'S,

621 Washington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. Also,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY,

No. 621 Washington Street,

Dec 29 1m Facing Maguire's Opera House

## WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to flow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

no16-1f

ZENAS WHEELER.

## DEETKEN'S

Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 50 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov8-3m

JULIUS SILVERSMITH,

Commissioner for Nevada Territory,

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

## LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

JAMES PHELAN,

(LATE J. & M. PHELAN.)

IMPORTER AND JOBBER,

Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited  
TERMS LIBERAL. Jan. 1-1f.

## For Sale Cheap!

A HORIZONTAL STEAM ENGINE OF 4 Horse Power, Fine Boiler, in excellent order capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,  
Federal Building, cor. Battery and Washington Streets, Room No. 23.

THEODOR KALLENBERG

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps.

Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
a17.3m San Francisco.



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, MARCH 9, 1863.

NO. 19.

## Beth's Hydraulic Pressure Wheel.

We have received, from the inventor the following description of this Wheel which we give, with the accompanying illustrations. In consequence of numerous letters of enquiry received by the inventor we are requested to state that this description is presented in place of the circular, the publication of which will necessarily be delayed for a short time.

It has been the object of the inventor to produce a practical water wheel, adapted to the peculiar necessities of the Pacific Coast—one that shall be simple, compact, durable and effective—rendering the small streams, which tumble down from the mountain ranges as available for water power as the larger and more sluggish ones which flow through the valleys. Although the principle upon which this wheel is based is in some respects what is usually termed "reaction," still its construction is such that the action of the water is direct, and it is exclusively a "pressure wheel," the water having nowhere in its passage a higher velocity than three or four feet per second.

The above engraving is a representation of the wheel as applied to high falls. The water is conveyed in sheet on pipes from the ditch or flume, admitted at the top of the cylindrical casing enclosing the wheel and discharged through the draft pipe at the bottom. In Fig. 2, one half of the casing is removed (the two halves are alike) showing the interior and also a view of the wheel, which consists of three steel blades or buckets diverging gradually from the central brass collar between which the inside contact flange the buckets are clamped and adjusted to give the required openings between them.

The buckets revolve in the space between the annular crown confining the water in its passage to the openings. The ample space around the wheel allows the water to approach it from all sides, with the full pressure due the fall; and the effective pressure upon the convex surface of the buckets in the direction of the arrow, is as their inclination which the openings between them is a measure. When the velocity of the wheel reaches 60 per cent. of the velocity due the fall, the tendency of the water toward the openings ceases, and it passes directly to the center of the wheel, passing inward the depth of an opening, while the wheel is revolving the length of a bucket. As the water passes the

## J. M. BETH'S HYDRAULIC PRESSURE WHEEL.

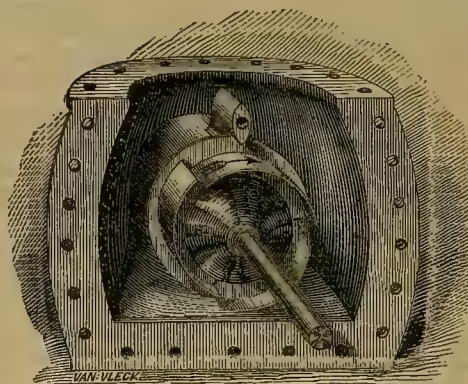
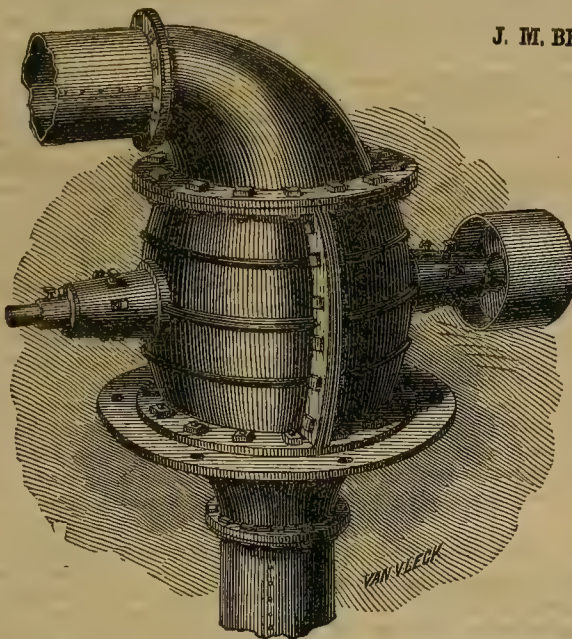


FIG. 2.

opening, it is divided by the central flanges and collars, one half passing off at each end through the crown; the whole inside being left open,

allowing the water ample room for its passage into the draft-pipe below.

The tendency of the water to go directly to the center of the wheel, with a constant pressure due the fall, on the whole convex surface of the buckets, and in a slow smooth and even flow, is in accordance with both theory and practice, and requires no directing surfaces, guides, or shutters, to give it that direction. The practical working of the wheel shows that the result is secured by the curve of the buckets which is such as to give the water a uniform motion through the wheel (in whatever position they may be adjusted) and to their cutting edge and finished surface and to the rapidly changing position of the opening between them which does not allow time to overcome the inertia of the water or draw it toward them.

The pressure of the water is equally distributed around the wheel. There is therefore no pressure on the bearings, nor is there any lateral pressure.

To secure the perfect running of the wheel between the annular crown, without leakage or friction, the bearings of the shaft are placed in hexagonal boxes lined with lignum-vitæ, and adjusted by set screws, as is shown on the hubs on each side of the casings. In these bearings, in the solid and unyielding cast iron casing, and with the wheel finished in a lathe and perfectly balanced, there is no vibration or trembling, when running at high velocities; and the least possible amount of friction.

Provided clear water cannot be obtained for lubricating the bearings and sealing them to exclude the air from the draft below, oil may be used and hemp packing on the inside of the bearings.

Muddy water does not injure the buckets, as a small space is allowed between the edge of the buckets and the crowns, without loss from leakage, it being counteracted by the centrifugal force imparted from the velocity of the wheel.

One of the most distinctive features of this wheel is the simplicity and economy with which it is applied to different kinds of machinery.

For Circular Saw Mills, it is so constructed as to give the required speed when placed on the saw

harbour. A 16-inch wheel put in operation last fall, near Aurora, N. T., drives a circular saw with power sufficient to cut 1000 feet of boards per hour.

The wheel is placed on the saw harbour and 18 feet above the foot of a fall of 40 feet.

In building a mill of this description no sawed lumber is required before putting it in operation. A site being selected, not more than 27 feet above the level of the back water, (the draft cannot well be made perfect beyond that point, and perhaps not even to it, at high altitudes, it being limited by the extent of the atmospheric pressure; as far as it goes, however, it is fully equivalent to the direct pressure above the wheel providing the draft pipe is air tight and terminates in the back water below,) sleepers are bedded into the ground upon which the carriage and wheel are placed. The water is conveyed to and from the wheel in a sheet-iron pipe.

The durability and economy of this mill (its cost is less than half the usual amount,) and the ease with which it is almost instantly stopped and started and the speed controlled, are qualities which will be appreciated by those acquainted with the business. Small wheels may be applied with the same advantage to shingle saws, to small mills for grinding grain, and various other purposes. When the required motion is slow, as in quartz mills, the wheel has a great leverage, and the speed is reduced with light belts and pulleys, and with little wear and tear, compared with what would be required for raising speed from a lower velocity.

For flour mills the wheel may be (on falls of any considerable height) placed on a level with the pulley on the spindle of the stone and the power transmitted by a single belt, while the position and speed of the wheel affords equal facilities for driving the other machinery of the mill.

The inventor of this wheel knowing that its success depends entirely upon the proper application of the principle has each wheel constructed in accordance with his own specifications.



cification of size, proportion and finish, to suit the height of fall, quantity of water, at different times and seasons of the year, and the purpose for which it is to be used; and as the wheel is complete and in running order on leaving the shop its application is easy and success certain in the hand of any mechanic of ordinary ability. When the wheel is applied to low falls the outer or cylindrical portion of casing is removed and it is placed in the open flume, the size being made to suit the volume of water.

The speed of the wheel is exactly in proportion to the quantity of water passed through it therefore a self-acting gate which regulates the supply, regulates the speed accordingly. This has been found to work perfectly in practice.

The guarantee upon which the wheel is furnished is that it shall equal in power the Overshot Wheel. No regular scale of prices can be given in consequence of the different degrees of finish, proportions and applications required. It is however much less than that of the most perishable wooden structures of the kind.

Full information concerning the wheel may be obtained from the inventor personally, by applying at the Miners' Foundry, on First Street, San Francisco, or by addressing

J. M. BETH.

Miners' Foundry, San Francisco.

[FROM THE LONDON "MINING AND SMELTING MAGAZINE."]

#### THE MEXICAN METHOD OF AMALGAMATION.

BY JAMES NAPIER, JUN., F. C. S.

Late Chemist and Assayer to the Guanajuato Mint, Mexico.

[CONTINUED.]

In the introductory section I gave a brief sketch of the history of the Patio amalgamation process, and a few analyses showing the general composition of some of the silver ores in certain of the Mexican mining districts. In the present section I propose describing the methods employed for grinding the ores and separating the gold; it being understood that my description refers particularly to the district of Guanajuato. As the mode in which the sales of the ores are conducted is characteristic, I may be permitted to give a prefatory notice of it.

#### SALES OF ORES.

Some of the poorer mines of Guanajuato are worked by what are called "Buscones" (searchers.) These are miners answering to the Cornish "tributers," who work without any definite pay, but receive half of the value of the produce they extract from the mine. At stated times a sale takes place at each concern, when these *buscones* arrange in separate lots whatever they may have extracted since the previous sale, in the court-yard of the mine. These lots of ore are cunningly laid out, so as to expose the richest portions to the view, some showing much taste in their arrangement; and each miner stands near his own lot and keeps it constantly sprinkled with water, which has the effect of making the mineral look darker and richer.

The various "Rescatadoras" (purchasers) take from each lot a small portion of ore, as average a sample as possible, which they have finely ground, and tried or assayed on the spot. This is done by placing about a handful of the ground ore in a "Jicara" or small round bowl, washing away the whole of the earthy particles, and judging from the metallic portion remaining of the richness of the ore. It is really astonishing to mark how by this rude process those who constantly practise it are able to arrive at results so near the truth. However, many purchasers have assays now also made by fire for greater accuracy, and in this case the samples are obtained the day before the sale. These assays are either made by scorification, or by smelting the mineral with red lead, crude carbonate of soda, a little charcoal and salt, and cupelling the resulting button of lead.

At the regulated hour for the sale a bell strikes, as a signal that it is about to commence. The person entrusted with the sale takes his place successively at the foot of each lot, and every buyer in turn whispers into his ear what he wishes to give for that parcel. When all have given in a price the lot is called over to the highest bidder, the rate of his bid being named; where two buyers bid the same amount, the first bidder gets the preference. The person acting as auctioneer and the rescatadoras thus move from lot to lot till the whole of the ore in the yard has been disposed of. The weight of these lots of ore is not ascertained by weighing,

but has to be judged of by the eye. This, like the trying of the ore, is accomplished by those who have had long practice with remarkable accuracy; and on the whole, one of these sales is rather exciting. The moment a lot of ore is called out to a buyer, the miner has nothing more to do with it; the purchaser having to remove it from the ore yard to his reduction works, or *Haciendas*. This is usually done packed in sacks on mules' backs; the ore, if in very large lumps, as it often is, being previously broken into moderately sized pieces. Each sack holds about 175 lbs., and two of them are loaded on each mule.

#### GRINDING THE ORES.

The first operation to which these ores are subjected is a coarse stamping. This process is carried out in what are termed "morteros" or "molinos," which are very similar to the stamps used at the Cornish tin mines. The extent of these *morteros*, or the number of heads, naturally depends on the extent of the "Hacienda," and they are worked by mule power, excepting in a few districts, where steam or water is employed. The ore, as it is fed to the stamps, is in pieces about the size of the fist; as it is stamped, it falls into a piece of strong hide, perforated with small holes, and fixed in an inclined position. What does not pass through the holes is again returned to the stamps, whilst the finer portion, called "*Granza*," a very coarse sand, is conveyed to the "arrastres" or fine grinding mills. One stamping mill or battery, with ten stamp heads, worked by six mules which are changed every six hours, is capable of stamping from three o'clock in the morning till seven in the evening forty cargas of 350 lbs. each.

[Here follows an illustrated description of the Mexican *arrastre*, with particular directions for constructing the same. California miners are so well acquainted with the principles and working of this machine that there is no necessity for reproducing that portion having reference to it, until we come to the concluding paragraph, which we subjoin.] As soon as the bottom of an *arrastre* has been put in, new grinding stones are set to work to grind "*Cabeceilla*" (the residue remaining after washing a torta) mixed with water. This ensures the whole of the interstices being filled up, and is continued for one day, when a second stone is attached. At the end of three days a third is added, when the grinding of poor ores may be gone on with, and after four or five days the fourth stone is added and the fine grinding gone on with.

#### FINE GRINDING IN ARRASTRAS AND EXTRACTING OF GOLD.

In districts such as Guanajuato, where the ores contain gold as well as silver, the former metal is generally in such small quantities that if extracted as an alloy with the whole bulk of the silver it would scarcely pay the cost of extraction, at least in Mexico, but by adopting the plan of keeping the *arrastres* charged with mercury during the grinding, the gold is concentrated and made to yield very handsome profits. When this method of concentrating the gold was first used in Mexico we are not at present aware, but Humboldt states that he was informed it was in use in some districts in 1804, but that it was not employed in Guanajuato, where he was, nor did he see it in operation.

The quantity of ore from the stamping mills charged to each *arrastre* at one time varies according to circumstances; however, in the best regulated works in Guanajuato, where the grinding is without doubt carried to greater perfection than in any other district in the republic, an *arrastre* of the dimensions given above is charged with from six to seven hundred pounds. To this is added a barrel of water—about ten gallons—which is enough to bring the mass to the state of a thick cream. On the quantity of water added depends much the quality of the grinding which will result. Humboldt states that in no part of Europe had he ever seen such fine grinding as in the Great Haciendas de Plata of Guanajuato. If the *arrastre* be a new one, or one from which the amalgam has just been removed, there is added from five to ten pounds of silver amalgam: that is, after the *arrastre* is well "*ascentada*," or in good working order. Some amalgamators prefer having this amalgam very "dry," or containing but little free mercury; whilst others again prefer employing it with more mercury. However, it appears to be certain that the less mercury it contains the better, up to a certain point. The reason given for adding amalgam instead of mercury alone, is, that if mercury only were added

it would run immediately into the crevices of the bottom, and thus be of little or no use; whereas the amalgam is spread by the action of the stones over the whole surface of the bottom. This I think is true; but it is also evident, from experiment, that amalgam will take up gold and silver much more readily than pure mercury, and that up to a certain extent the freer the amalgam is from mercury the better will it take up the gold and silver. Might not many of the gold amalgamating machines patented of late years in this country have succeeded much better had amalgam been added instead of so much pure mercury; I mean, amalgam from which only a small quantity of mercury would ooze when pressed between the finger and thumb.

From time to time the 24 hours (the usual time required to grind the above weight of ore) water is added to the *arrastre* as follows:—The *arrastres* are charged about four o'clock every morning, when, as we have already stated, one barrel of water (10 gallons) is added; at nine o'clock another, and sometimes one and a half; at eleven o'clock another barrel and a half; at twelve o'clock one barrel; at three o'clock, three barrels, and at five o'clock four barrels—in all twelve barrels, or about 120 gallons of water. This quantity will vary somewhat with different classes of ores. The grinding should be so perfect that no grittiness be felt between the fingers when the hand is inserted into the mass. As the operation goes on, the amalgam gradually searches into the crevices of the *arrastre*. Every second morning, a small portion, called a "*Tentadura*," or sample of the amalgam ("*Pella*") is taken from each *arrastre*, cleaned well with water, and its condition examined. From its "dryness" or "moistness," that is to say, from the greater or less quantity of mercury which can be expressed by pressing it with the thumb against the inside of the "*jicara*" containing it, is judged how much, or if any, fresh mercury will have to be added to the next grinding; for the amalgam is not removed but at the shortest every three months, unless the ores be unusually rich in gold, when the *arrastres* are freed from amalgam. The usual amount of fresh mercury added to each *arrastre* during grinding is about half a pound every second day. However, this will vary very much with the ores operated upon; but as a rule the amalgam should not contain more than about 20 per cent. of gold and silver. At the end of 24 hours, when the grinding is concluded, the "*lama*" or slime is baled out with wooden bowls ("*Bateas*") about half a vara in diameter, into a barrel, in which it is carried and poured into a place prepared for its reception. In some haciendas it is baled into a small wooden launder which leads to the receptacle; and in other works each *arrastre* is furnished with a large plug near the bottom, which when opened, allows the thin slime to run through conduct pipes to the receptacle. When the slime is moved by hand with a bowl, there is laid on the bottom of the *arrastre* a small plate of lead or iron, so as to prevent the bottom from being scraped and any of the rich amalgam being removed by the bowl. This operation lasts but a very short time about half an hour, and when concluded a fresh charge of *graza* from the stamps is added, and the grinding again gone on with as we have described. Two mules, which are changed every six hours, are attached to each *arrastre*. In this operation there is generally an augmentation of weight to the extent of about 8 or 10 per cent. from the wearing away of the grinding-stones. In most cases the *arrastres* are arranged in a double row in a house called a "*Galera*" (galery.) The bottom of an *arrastre* will last about twelve months, but the "*Voladoras*" or grinding stones do not last more than a month, and in many instances not even so long.

#### A NON-AMALGAMATING ALLOY.

There appears to be an alloy of gold and silver which will not combine with mercury. My friend, the late Mr. Henry Mackintosh, who had long experience in these matters, stated to me that on two occasions he had found an alloy of gold and silver which he could not get to amalgamate after continued grinding with mercury for six months. Mr. Mackintosh could not remember the composition of the alloy, but he thought it contained about 50 per cent. of silver and 50 per cent. of gold. Sonneschmidt, in speaking of the action of mercury on gold states—"On various occasions I have seen native gold finely divided that would not combine with mercury, which I thought was owing to the surface being covered with some foreign matter; at the same time

[CONTINUED ON 6th PAGE.]



# MINING AND SCIENTIFIC PRESS.

## SAN FRANCISCO MINING NOTICES.

### ASSESSMENTS LEVIED.

Assessments upon Mining Stocks have been levied as follows:—

Garibaldi.—Assessment of \$1 per share, levied March 2nd.

Sutro.—Assessment of \$1 per share, levied Feb. 23, payable March 23.

Silver Quartz Mill Co.—Assessment of 5 per cent. levied Feb. 23, payable March 28.

Helvetia.—Assessment of 25 cts. per share, levied Feb. 17, payable March 10.

Zouave.—Assessment of \$1 levied Feb. 22, payable Mar. 20.

Rogers.—Assessment of \$5 per share levied Feb. 4, payable Mar. 15.

Sam Wright.—Assessment of 50 cts. per share levied Mar. 2, payable immediately, delinquents to be sold Apr. 2.

Napoleon (copper).—Assessments of \$3 per share levied Mar. 3, payable in 30 days.

Golden Age.—Assessment of one dollar per share levied Feb. 24, payable March 26.

Washoe Gold & Silver.—An assessment of 2 per cent. on capital stock was levied Feb. 16, payable Apr. 1.

Rhodes' Diggings.—Assessment of 25 cts. per share levied Feb. 26, payable Mar. 5.

Texas Co., at a Meeting held Feb. 14, levied an assessment of one dollar per share, payable to the Secretary in Virginia City.

Santa Rosa Co.—February assessment of 20 cents per share now due and payable.

Madison Co.—An assessment, two dollars per share, was levied Feb. 17, payable immediately, at Office, 600 Merchant St.

Union Co.—An assessment of one dollar per share was levied February 16, payable on or before March 25.

Pena Co.—An assessment of \$3 per share was levied Feb. 5, one half payable March 1, balance April 15.

Kossuth Co., Devil's Gate District.—An assessment of 10 cts. per share was levied Feb. 7.

Constitution Company levied an assessment of 25 cts. per Feb. 11, payable immediately.

La Plata Oro Co. levied an assessment of five dollars per share, Feb. 9, payable at Office of the Secretary in Virginia City.

La Plata Co. levied an assessment of 50 cts. per share Feb. 2nd, payable at Office of the President.

Alamo Co. levied an assessment of 50 cts. per share, Feb. 11, payable on or before March 20, at 115 Cal. Street San Francisco, or at office in Carson City.

Tucker Co. levied an assessment of 25 cts. per share, Feb. 11, payable immediately at 608 Merchant St.

Hawley Co. levied an assessment of one dollar per share, on Feb. 9, payable on or before March 12, to Superintendent at the mine, or Secretary at Office.

Slate Range Co. levied an assessment of 50 cts. per share, Feb. 4, payable, March 15.

Moss G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., or to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 75 cents per share, Jan. 27, payable to the Secretary, at 428, Montgomery St.

El Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to the Supt.

Gaudaloue S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or to the Superintendent at the mine in Aurora, (Esmeralda.)

Dios Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cents per share was levied Jan. 24, payable immediately.

Sonora Mining Co.—An assessment of 25 cents per share was levied Jan. 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount David-on Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Adriatic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norcross.—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skae, at the Mine, on or before Feb. 25.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

Hale & Norcross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and C St., Virginia City.

Baltimore America Consolidated.—An assessment of 50 cents per share was levied, Jan. 5.

Savage.—An assessment of \$35 cents per share was levied, Jan. 7.

Hawley.—An assessment of \$1.00 per share was levied Feb. 9, payable March 12.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

### COMPANY MEETINGS.

Chs. Caney Co.—Special meeting of stockholders will be held on Wednesday, March 18, to consider the propriety of an increase of capital stock.

South Utah Co. will hold its annual meeting for election of Trustees, etc., at No. 608 Merchant St., March 20.

Nevada Co. will hold its annual meeting for electing Trustees, etc., at 608 Merchant St., March 20.

Annie Laurie Co. will hold its annual meeting for election of Trustees, etc., March 19.

### ASSESSMENT SALES.

Sales of Stock for non-payment of assessments are advertised to be sold as follows:—

Oriental Tunnel Co. will sell, on Saturday, Mar. 28.

Mars will institute proceedings against delinquents, Mar. 16th.

Planet will institute proceedings against delinquents Mar. 16th.

Meredith.—Annual meeting of stockholders will be held Monday, Mar. 16, at 2 P. M., at 712 Montgomery St.

Texas Co. will sell delinquent shares, on the 14 of March.

Meredith Co. will sell delinquent stock, March 2n.

Coso Co. will sell delinquent stock, March 18.

Moray Co. (V. City).—Suits for delinquent assessments will be commenced, March 14.

Michigan Co. (Gold Hill) will commence suits for delinquent assessments, March 16.

North Potosi Mining Co.—Sales delinquent stock will be made March 17.

Peytona G. & S. Mining Co.—Sales of delinquent stock will be made March 1st.

Cole Silver Mining Co.—Sales by Jerome Rice & Co., 327, Montgomery St., San Francisco, on the 25th of February.

Combination G. & S. Mining Co.—Sale by E. S. Spear & Co., at 433 California St., on the 10th day of March next.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

Desert Mining Co.—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

### GENERAL NOTICES.

Yellow Jacket.—Corporate Deed now ready for signature at office of H. G. Maynard, Gold Hill, N. T.

Jenny Lind (Esmeralda).—Owners of ground in this Cot are requestes to call and sign deed of trust at 608 Merc., an St.

Mount Hope Co.—Persons claiming stock are requested to present title papers for examination till March 16.

U. S. Mining Co.—All persons claiming stock are requested to present title papers for examination at Nos. 7 & 8 Government House.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

Henry Martin G. & S. M. Co.—"Thomas Wallace, Trustee." gives notice that whereas certain parties illegally claiming to be Trustees of this Company, have changed the name of the Corporation to the North Star G. & S. M. Co., and illegally elected officers for the same, the public are cautioned against such acts, etc.

THE SWEZEY Co., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Beach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This Journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80 Names can be sent in at different times and from different Post-offices Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.



## THE HUMBOLDT MINES.

Mr. James B. Glasgow called at this office a few days since and exhibited some fine specimens of silver bearing rock from the Sheba and Ben Franklin veins, in Star district, Humboldt Co. The rock is evidently very rich. Accompanying the specimens were several buttons of silver, one of which weighed over one ounce, taken from a small piece of rock from one of the samples shown. Mr. G. informs us that active operations are in progress toward opening the Sheba and Ben Franklin ledges, at different points along their line of direction. Not less than eleven tunnels are now in progress, upon and approaching these two leads, which run parallel with each other, and less than 1000 feet apart—the Sheba being the uppermost one or the one highest up the hill.

The Ben Franklin lead was first opened directly upon the out-crop, by the Whitmore company, of which, our informant is a member. The rock before us was taken from a tunnel about 30 feet in length, which cuts the vein about 20 feet from the surface. The Union Band company is running a tunnel to strike both leads, and are now 200 feet into the hill.

The Sheba company are still at work upon their ground as described in a recent issue of this paper.

A large portion of the stock of this company is held in this city and the company has, within a few days, been placed upon a thorough working footing, under the superintendence of Mr. RICHARD POWNING, an experienced miner. Mr. GLASGOW assures us that we were correct in contradicting the rumor started sometime since, to the effect that, a considerable quantity of the Sheba rock had been crushed in Falls mill, near by the vein, with no other result than a generous yield of lead and antimony. No rock from that lead has yet been crushed or amalgamated except by hand process, and the assays thus made have resulted to the most unequivocal satisfaction of all parties concerned. Arrangements will soon be made for reducing and amalgamating on an extensive scale. The American Basin company has struck the Sheba ledge, in their tunnel and found it very rich. This ledge is about 15 feet thick, instead of less than 15 inches, as stated in a morning contemporary, a few days since. All the ledges in this vicinity are very heavy—the Ben Franklin is about 11 feet thick, the San Bernardino 15, and the Mammoth about one hundred feet thick. The Ben Franklin shows native silver in thin sheets, like strips of tin foil. There are numerous other leads in this, the Star District, which are known to be rich in silver; among which we may mention the Yankee, the Mammoth, the Alamo, Yellow Jacket, J. W. Davis, etc., all of which are in progress of development by tunnels and shafts. Santa Clara joins this district on the North and has many rich leads, upon which much work has been done, by tunnels and shafts, some of the former having been driven from two hundred to two hundred and fifty feet.

## PRINCE ROYAL AND HUMBOLDT DISTRICTS

are also undoubtedly rich in mineral, although not so much developed as those previously named.

## UNIONVILLE,

in Buena Vista district is the county seat. More attention has been devoted to the improvement of town property in this than any other portion of the county. It is thought by some not to be so rich in mineral as other portions of the county, but this is probably owing to the fact of its not being so well developed, attention, as already intimated, having been more particularly directed to another channel. Another year will probably place it on very nearly, or quite equal footing, in mineral value, with any other district in the county.

## ST. MARYS,

a small district lying between Buena Vista and Star Districts possesses more topographical advantages for mining operations than any other in the country, and the best water power in that portion of the country. The same series of leads which enrich Star district, pass through this also, and probably continue on to Buena Vista.

## MILLS.

There are four mills in the county about ready for operation—three of which, viz.: Dodge & Co., and Richard Homfray, at Star City, and W. C. Fall at Unionville, have already had their machinery in operation, but have not yet done any regular work. Fall, we understand, has crushed

several tons of rock from the National lead, but we have heard of no returns.

Judge Watson is now putting up a mill at Star City, near Homfray. Other parties we believe are about locating sites for mills or have already done so. These mills with the exception of Homfray's are all to be driven by water, of which there is an abundance the year round. Mr. H. has put up a steam engine, for present use, but will erect a water wheel during the coming summer.

## HEAVY INVESTMENTS.

Col. O'Connor, of this city, agent for English Capitalists has recently invested some \$30,000 in extensions of the Sheba and Ben Franklin leads. Other parties—capitalists—have also invested not less than \$75,000 in the same locality within a few weeks past. The above facts show, most conclusively, that Humboldt is far from being a "failure," as has been asserted in some quarters. The coming season will doubtless reveal some most astonishing developments in the distant Humboldt and Reese River regions. We are collecting facts for a full and elaborate description of the Humboldt region which we hope soon to lay before our readers.

## GOLD IN HUMBOLDT.

Gold bearing quartz has recently been discovered about 15 miles East of Star City. The ledges are apparently very rich and carry coarse gold. A gentleman recently from Humboldt informs the Territorial *Enterprise* with regard to this discovery, that quite a rush has been going on to the new "Sierra District," in the range of mountains some fifteen or twenty miles East of Unionville, and that locality now boasts a population of nearly two hundred souls. The principal ledges in it are the Croesus, a marvellously rich gold ledge; the Badger and the Annie, silver ledges, and the Great Eastern series of six ledges—also silver. The Great Eastern is forty feet wide, and the Annie and Badger, contain but little base metal, and assay \$9,000 to the ton. Placer diggings have been discovered in the vicinity of the Croesus which yield from \$15 to \$20 a day to the hand.

## AGRICULTURAL DEVELOPMENTS.

Recent explorations are developing the existence of much valuable agricultural land in the region of the Humboldt mines. A beautiful valley, of quite large extent, undoubtedly capable of high cultivation, has quite recently been discovered some 30 miles north-east of Star City. Up to Feb. 21st no snow had fallen, to lay any considerable length of time, in Unionville, and but a few inches in Star City. In the valleys below, the ground had not even been whitened by the wintry mantle, and the cattle there were enjoying themselves hugely, in their immunity from winter blasts and in the abundance of green herbage.

This region, as soon as spring opens, will afford an abundance of employment for laborers, who will be needed to open and develop the mines already discovered. Unionville, Star District, contains an abundance of water power for milling purposes. There is also a plenty of wood for fuel and mining timber. Wood is now selling at \$8 and \$10 per cord.

## REESE RIVER.

The Reese River excitement still continues with unabating zeal. The town, Clifton, as it is called, recently laid out there, is progressing finely. Thirty or forty new comers recently jumped a large number of lots previously located, but subsequently gave them up to the original owners. The mineral developments are progressing finely. One hundred feet of the Comet ground recently changed hands at \$40 per foot. Wells, Fargo & Co. have already established an agency there, and thus placed the inhabitants of Clifton in direct communication with 'the rest of mankind.' The arrival of a "Lady" is duly chronicled. She is to take charge of an hotel in the new city, which already boasts of its "Occidental" and "Lander House." The inhabitants are looking anxiously for the return of Dr. Veatch, who proposes to open an Assay office there, by which the miners of that region may be enabled to ascertain the value of their "feet" and "indications," without the tedious delays of forwarding their sample specimens to Virginia City. The Dr. is one of the most reliable Assayers and Mineralogists we have among us, and appears to be held in high esteem by the pioneers of that distant mining outpost, with the development of which he is most intimately connected. We have the promise of an article now and then from his pen, for which the Dr. will please consider this paragraph a reminder.

A MINING TRANSACTION.—A miner from the mountains stepped into the salesroom of one of our most wealthy merchants, about four weeks since, stated that he was "flat broke," and asked for \$150, offering to make over to the aforesaid merchant, a mining claim for the money. The merchant knew nothing of the man or his claim, but gave him the money and took his bill of sale. He thought no more of the transaction until a few days since, when a stranger called at his place of business and asked him if he was the owner of such a claim. Receiving an affirmative answer, the stranger offered him \$4,000 for the same. The merchant hesitated a moment when the stranger added another thousand to his offer. The merchant immediately closed with his visitor and pocketed the cash without any further remarks. The merchant is still ignorant as to whether he sold a folly or a fortune.

The above paragraph, which we started a few weeks since, has gone the rounds of the press, sometimes credited, sometimes not. One of our mountain contemporaries, the *Messenger*, at La Porte, intimates that we have drawn upon our imagination for the story. Not at all, friend DEWEY. The only mistake we made was in naming the sum paid by the merchant—which should have read \$500 instead of \$150. We have now however, to add a little to the original story, to the effect that another offer of \$8,000 has been made for the same ground. On further enquiry we are enabled to state that the "Merchant" can be seen every day in the week (Sundays excepted) at No. 421 Clay St. The mining stock in question was 20 feet in the Antelope, at Esmeralda, which was quoted at the Stock Board in this city on the 6th of January last at \$95 per foot, and on the 2nd of March, at \$400. A little cyphering will satisfy any one that such a transaction as noticed above, *might* have been made, as indeed it really was.

A NEW BOARD OF BROKERS.—An association of brokers has lately been formed in this city, under the designation of The Stock Exchange, and they hold their first meeting to-day, for the transaction of business. The time of meeting is from 1½ to 2½ o'clock, P. M. Samuel Purdy is President; Isaac Bluxome, Jr., Vice-President; M. G. Elmore, Secretary, and J. H. Bullard, Treasurer. There are now 30 members, and a number of applications have been made by others who propose to join them.

The origin of the Board, as we are informed, was in consequence of raising the price of membership admission in the Stock and Exchange Board. Their first entry-dues amounted to \$100, which were raised to \$250, and are now fixed at \$500. The entry-dues of membership to the new Board will be \$100.

BENEFIT CONCERT.—We notice, by posters, that RISING SUN DIVISION, No. 1, S. of T. of this city, are to give a Benefit Concert, at Dashaway Hall, Post St. on the 12th inst., the proceeds of which are to be appropriated to furnishing their Hall, corner of Clementina and First Sts.

This is one of the most useful and energetic organizations of this description in the State. It is known, *par excellence*, as the "Literary Division." In addition to the usual exercises of such bodies, on alternate evenings of their weekly meetings the members engage in debates, and furnish written essays and compositions, which are embodied into what is called a "Paper." Some of these compositions we have seen, and can fully testify to their excellence. They may rank with first class magazine literature. These exercises are most beneficial, not only upon the members themselves, but upon the entire community in which they move. Such an institution, made up almost exclusively of young men, and ladies, is eminently worthy of support and encouragement, and we trust their Benefit on Thursday Evening next, will be a Benefit indeed.

WHAT NEXT?—A mine of Epsom Salts has been discovered somewhere on this Coast, but where we are unable to learn. The discoverer, however, is willing to incorporate for a reasonable consideration.

## OBITUARY.

We regret to announce the death of JAMES P. CHENEY, son of RICHARD CHENEY Esq. of this city, who died, on Thursday last, at the residence of his Grandfather, Dr. Peck, at Northampton, Mass. aged 19, of a fever contracted in the Chickominy swamps.

We knew him well. He was always generous, brave and kind. A great favorite among his fellows, no party or game of ball was complete without JIMMY.



## GENERAL MINING STOCK REPORT.

REPORT OF SALES  
At the San Francisco Mining Stock Board,  
For the week ending March 7, 1883.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	—	—	—	2500	2800	—
Gould & Curry	4,800	4	600	—	—	—	8000	8000	3150
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	900	900	—
Chollar	5,600	4	500	—	550	—	575	620	—
Potosi	2,800	2	400	140	145	165	165	172½	160
Hale & Norcross	80	2	600	—	—	875	—	—	—
Sierra Nevada	3,000	1	300	75	—	80	75	90	90
Danley	8,000	4	600	—	—	—	—	—	—
Burning Moscow	4,800	2	100	95	105	110	145	175	200
North Potosi	2,000	1	300	44	40	42½	40	40	30
Hogers, F. D.	3,000	1	250	13	12½	13	13	13	—
Meredith	7,200	2	125	—	32	30	—	—	27
Charles Caney	1,800	1	30	62½	61½	65	62½	62½	60
Sacramento	1,800	1	500	68	68½	62	65	65	65½
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savaco	500	1	—	1200	—	—	—	—	—
Ion	—	—	—	—	—	120	120	—	—
El Dorado	—	—	—	—	—	40	—	50	—
Norton	1,600	1	—	25	26	28½	30	29	27½
La Crosse	—	—	—	5	5	—	—	5	4
Dios	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	20	—	—	—
Burnside	—	—	—	—	37	40	46	47½	50
Admiral	—	—	—	—	6	7½	10½	15½	18½
Cedar Hill Tunnel	—	—	—	—	4	4½	5	5	7
Mount Davidson	10,000	3	200	6	7	7	—	—	7
<b>ESMERALDA STOCKS.</b>									
Wido West	2,600	4	60	475	450	447½	410	407½	405
Antelope	1,200	1	500	390	380	385	405	400	395
Esmeralda	1,600	1	1000	58	56	62½	60	57½	55
Real del Monte	4,400	1	400	90	85	80	80	75	70
Elina	1,200	1	100	—	—	—	—	—	—
Utah	—	—	—	95	98	95	102½	100	100
Silver Hill	3,000	1	—	48½	48½	50½	53	50	—
Nevada	—	—	—	100	—	—	—	—	100
<b>COSO STOCKS.</b>									
Josephine	—	—	—	23½	27	28½	29	30	31
Coso	—	—	—	—	15	20	22½	23	25
Willow Springs	—	—	—	30	—	27½	—	—	31
<b>MEXICAN MINES.</b>									
Mina Prieta	—	—	—	—	140	—	—	—	—
Dios Padre	—	—	—	—	56½	60	—	65	60
<b>COPPER STOCKS.</b>									
Napoleon	—	—	—	25	22	24	21	21½	—

## STOCK REMARKS.

SAN FRANCISCO, March 9th 1883.

A large amount of business has been done in mining stocks the past week, confined mostly to middle class shares. Fluctuations and fancy have entered largely into operations, and excitement has run higher than at any previous period since the bulls and bears first made their appearance upon the Montgomery pave.

The leading excitement of the week has been the Burning Moscow, and grew out of telegraph reports of an exceedingly rich "strike" in the lead. The chief fancy operations have been confined to the Reese River Co. of which 2400 shares have changed hands at prices varying from \$6½ to \$8½. There need be entertained but little doubt of an ultimate and early advance in this stock.

The Ophir has declared another 48-dollar dividend, with the confident expectations of coming up to the old figure of \$72 at next dividend day.

While Wido West was the subject of considerable excitement on Monday, the stock suddenly rose to \$500, but soon dropped to \$395, and finally closed at \$400, at which it may now be quoted.

Mount Davidson still has an upward tendency.

Chollar has been largely dealt in at considerable advances. Potosi has also further advanced.

Sierra Nevada remains at about last quotations, notwithstanding its triumph over the La Crosse.

## TRANSACTIONS IN SHARES, FOR THE WEEK.

## NEVADA TERRITORY.

Ophir—12 at \$3000, 20 days.  
Gould & Curry—4 at \$3,240.  
Chollar 40 at 600, ½ cash, ½ 90 ds.; 40 at 650, ½ cash, ½ 90 days; 20 at 665 in 30 days.  
Sierra Nevada—10 at 75; 10 at 92½, 5 at 90.  
Burning Moscow—62 at 220; 40 at 200; 10 at 190; 20 160; 50 at 100 10 at 110, b. 30 ds.; 10 at 110; 10 at 120; 5 at 125; 20 at 110; 100 at 195; 10 at 200.  
Potosi—16 at 172½.  
North Potosi—30 at 45; 10 at 44; 23 at 40; 10 at 42½; 35 at 40.  
Sacramento—10 at 67½; 50 at 70, b. 30 d.; 30 at 68½; 70 at 65.  
Chas. Caney—4 at 60; 5 at 65; 20 at 67½; 5 at 62½; 5 at 60; 20 at 62; 20 at 60.  
Rogers F. D.—26 at 13.  
Norton 5 at 22; 10 at 25; 10 at 30; 50 at 31.  
Cedar Hill Tun.—30 at 4¾; 78 at 5; 20 at 5; 70 at 5½; 31 at 6½.  
Mount Davidson 60 at 8; 26 at 8; 25 at 7½; 25 at 8.  
Burnside—15 at 35; 7½ at 38; 25 at 40; 30 at 41; 12½ at 40½; 5 at 45; 5 at 46; 10 at 47½.  
Madison—10 at 8½; 10 at 8¾; 22 at 8; 8 at 15; 5 at 17; 10 at 15.  
Zouave 20 at 16.

Hazel Green—70 at 4½; 40 at 5; 10 at 5½; 40 at 6.  
Adriatic 50 at 6; 20 at 9; 85 at 15½; 75 at 17; 175 at 19; 75 at 18.  
Cole—10 at 20; 26 at 17½.  
Bullion (Van Horn Dist.) 400 at 1; 25 at 1¼.  
Union (Russ Dist.)—25 at 2; 25 at 2½.  
Lucerne—100 at 6½; 45 at 8.  
Oriental—10 at 10.  
Lady Bryan—25 at 6.  
Comet (Simpson's Park)—15 at 55; 10 at 60.  
Reese River 50 at 8¾; 50 7; 100 at 7; 150 at 7; 50 at 6½; 50 at 6¾; 300 at 7; 100 at 6½; 150 at 6¾; 25 at 7; 100 at 7; 20 at 7½; 100 at 7½; 80 at 7.

## ESMERALDA DISTRICT.

Wice West—5 at 400; 32 at 480; 10 at 475; 2 at 460; 10 at 450; 2 at 445; 10 at 420 10 at 410; 7 at 400; 7 at 405; Antelope 10 at 410; 10 at 320; 10 at 385; 8 at 405; 5 at 400.  
Esmeralda 40 at 57; 8 at 60.  
Real del Monte 10 at 95; 10 at 87½; 20 at 85; 37 at 77½; 37 at 75; 10 at 75.  
Utah—5 at 100; 5 at 105; 18 at 100; 35 at 100; 14 at 102½.  
Silver Hill—54 at 48; 20 at 47; 20 at 48; 10 at 50; 44 at 49; 10 at 48½; 15 at 50; 14 at 51; 5 at 54; 10 at 54; 10 at 53; 10 at 51; 5 at 52; 10 at 50; 5 at 49.  
Josephine 5 at 26½; 37 at 27; 16 at 28; 30 at 29; 20 at 27½; 15 at 29; 177 at 30; 150 at 31; 50 at 33.  
Bamboo—5 at 70; 20 at 40; 10 at 40;  
Gov. Nye—20 at 10½; 10 at 10; 55 at 10½; 25 at 11; 25 at 11½; 25 at 11½; 70 at 10; 30 at 12; 25 at 12½; 100 at 12½; 15 at 12; 10 at 12½; 90 at 12½.  
Coso—30 at 24.  
Bodie, No. 2.—15 at 6; 15 at 2¾.  
COPPER STOCKS.  
Napoleon—10 at 25; 10 at 21; 10 at 22.

## VIRGINIA CITY STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Ask'd		Bid	Ask'd
Asahland	9	—	Industrious	5	—
Allen	10	—	Irving	—	30
Albion	10	—	La Crosse	—	25
American Basin Co.	20	—	Laboring	11	—
Belvidere	10	—	McBee	25	—
Baltic	20	—	Milton	100	—
Birdsall	20	—	Mary Ann	25	—
Bullion (consolidated)	40	50	Monterey Co. (Spring Val.)	20	—
Burnside	45	60	Monarch	20	—
Burning Moscow	200	—	Madison	5	40
Beach & Paxton	65	70	Mohegan	35	—
Baltimore American	25	—	Nevada	115	—
Bald Eagle	2	—	Oriental	9	—
Bloomington	6	—	Oscola	10	—
Cedar Hill Tunnel	5	—	Pride of Washoe	18	22
Caledonia	10	—	Peytona	40	—
Comet (Simpson's Park)	60	—	Philadelphia	2	—
Cole	20	—	Recorder	—	—
Commercial	4	—	Santa Rita	35	—
Consolidated Cedar Hill	4	—	Santa Fe	12½	—
Dargan	—	—	Summit	5	—
Dayton Company	10	—	Swezey	—	—
Deatur	5	—	St. George	4	—
Deaur	5	12	Sierra Nevada	70	95
Empire	5	—	Sierra	22½	—
El Dorado	50	55	Sacramento	70	77
Eureka	25	—	Sigol	2	—
Ever'g Star, Argente's Dist	30	—	Texas	8	9
Empire Co. (Spring Val.)	25	—	U. S. Mining Company	5	—
Fairview	17	—	Union, Gold Hill	32½	35
Governor Nye	8	—	U. S. Tunnel	—	—
Golden Gate	7	—	Uncle Sam	3	—
Grass Valley	11	—	Utah	40	—
Golden Era	10	—	Virginia	5	—
Golden Eagle	10	—	Washington Ledge	6	—
Hazel Green	4	—	York	4	—
Harrison Co., Geller Ledge	4	—	Yellow Jacket	225	—
Hawkeye	20	—	Zouave	18	—

## REVIEW OF THE WEEK ENDING FEBRUARY 28, 1883.

The preparations necessarily consequent upon the municipal election which took place in Virginia City on Monday last, exerted a somewhat depressing influence on stock operations in that market during the week previous. Although the amount of business done was light, the rates, as a general thing, were materially improved. We note advances as follows:

Union, Gold Hill district, advanced from \$15 on Tuesday, to \$25 on Thursday, but declined again on Saturday to \$22½. This advance is attributable to hopes of success in the suit with the Yellow Jacket. Madison, which had remained quiet for several weeks, found sale on Wednesday at \$18; on Thursday it advanced to \$37½, where it appears to rest quietly—holders firm. The advance in this stock is attributable to the failure of the jury to agree in its suit with the Moscow. Beach & Paxton has advanced from \$50 to \$60, with but little stock offering—holders looking for still higher figures. Gov. Nye is also in considerable demand, and has advanced from \$5 to \$6, per foot, at which latter figure it remains firm. Oriental has advanced a dollar on a share, and is now quoted firm at \$6. Sacramento has materially improved and may be quoted at \$70, with but little in the market. This stock is chiefly held in this city. Hawley, in Spring Valley, which has been very quiet of late, is now again enquired for and quoted at from \$15 to \$20. There has been considerable excitement during the week in reference to the Bullion, growing out of its suit with the Yellow Jacket. Quite a number of "cards" have been published, and holders on both sides are nervous. The ground in dispute is very valuable. Considerable excitement has been created in certain quarters with regard to the Irving, which is chiefly held by one man—Winn, formerly of this city. The workmen upon this ledge are reported to have struck very promising ore, and appearances indicate the approach of a good vein. The principal holder is rating his stock at figures varying from \$25 to \$40 per foot. Winn claims that the Ir-

ving is an extension of the Comstock vein. The idea is probably a harmless fancy. If it should prove true, however, we should be compelled to admit that the ways of Nature are sometimes tortuous in the extreme.

## WASHOE STOCK REMARKS.

[COMPILED FROM THE DAILY TERRITORIAL ENTERPRISE.]

TUESDAY EVENING, February 24th.

There has been less done in stocks to-day than promised yesterday, yet a number of sales are reported. Bullion buyers have not been very abundant to-day. There has been any amount of "sparring" between buyers and sellers, but the result has been no noticeable change in our yesterday's figures. It is firm at \$45, with little in the market. Sacramento is in request at our quotations of yesterday. Ten feet sold to-day at \$66. Zouave is saleable at \$15 to \$16. Fifteen feet sold for \$15½. Dunn is enquired for at \$10; \$12 is asked with few buyers. Union, Gold Hill, is sought for, and the amount of assessments paid—\$15—is freely offered. Considerable is changing hands. There is something doing in Fairview at \$16. Texas is quiet. It may be quoted at \$7 to \$8. Pench and Paxton is advancing, and may be quoted at from \$45 to \$50. Pride of Washoe is saleable at from \$15 to \$20.

WEDNESDAY EVENING, February 25th.

The demand for stocks has been lively to-day, although transfers have not been numerous. Bullion is quiet. It may be quoted at \$40 to \$45. Sacramento is still in request at \$65 to \$70, although little is in market at these figures. Oriental is finding favor, and during the past two days, some 300 feet have changed hands at \$4 to \$5. It is in good request to-day at these figures. Hazel Green is saleable at \$3½ to \$4, to fill orders from below. Dunn is held stiffly at \$10 to \$12, with an upward tendency. Union, Gold Hill, is firm at \$15, with the demand considerably exceeding the supply. Madison has been enquired for at low rates, and a few feet found sale at \$18; \$20 to \$25 is offered, however, without accommodation. Zouave still in demand at yesterday's quotations, with but little in the market. Two or three south extensions of the Bullion, at Gold Hill, have been located, and the mysterious Comstock, on which this claim is supposed to be situated, is being freshly traced to the southward by experts and theorists.

THURSDAY EVENING, February 26th.

Operations in stocks have been neglected to a considerable extent to-day in preparing for the municipal contest of Monday. Madison, owing to the inability of the jury to agree in its suit with the Moscow, advanced to-day from \$20 to \$40, and its tendency is still upward. Fifty or sixty feet changed hands at \$25 to \$37½. Nothing has been done in Bullion. Owing to the card of the owners of the Coppers & Mills, renouncing all claim to the Bullion ledges, the stock is exceedingly firm at \$45 to \$50. Union at Gold Hill, has been extensively purchased during the week, and is now commanding a large advance on previous quotations. It cannot be quoted at less than \$25, although one or two small lots were sold to-day at lower rates. Its hopes of success against the Yellow Jacket seem to be strengthening. The ledge in dispute is of first class value. Gov. Nye is in request at from \$6 to \$7, and is being largely monopolized for the purpose of speculation, it is presumed. Oriental is enquired for at \$4½ to \$5, to fill orders from below. With these exceptions we have no changes of moment to note from our last quotations.

FRIDAY EVENING, February 27th.

There has not been much done in stocks, to-day, although the market is exceedingly active. Bullion is quiet. Ten feet sold at \$42½, fifteen at \$45, and ten as low as \$38. Union at Gold Hill, is still upward in the market, and is inquired for at \$20 to \$25, with little accommodation at these figures. The Yellow Jacket is also enquired for at an advance. The ledge in controversy is one of the best in the Territory. Beach and Paxton is meeting with considerable favorable comment. \$50 is offered for it, without takers. This company has filed its papers of incorporation, Madison is offered at \$35 to \$40, with little dealing at these rates. Harrison has advanced a shade in consequence of the suit, and may be quoted at \$6 to \$7, for locator's title. Very fair looking quartz is being taken from the Irving, and the probability of striking a ledge of value in that claim is brightening. Oriental is in request at an advance of about \$1 on yesterday's quotations.

SATURDAY EVENING, February 28th.

Nothing of special importance has been done in stocks to-day. Inquiry has been free, however, and is quite equal to the demand. Little has been done in Bullion. The "cards," pro and con, in circulation, have affected the prices to something of an extent, and buyers and sellers are nervous. It may be quoted at \$40. Union, Gold Hill, has been dealt in to-day at our quotations of yesterday. 40 feet changed hands at \$20 to \$25½. This stock shows indications of an advance. Yellow Jacket can be sold at \$210 to \$225, for accepted title, but it is obtained with difficulty in this market. Oriental is advancing, for some reason—proximity to a ledge, we are informed. It is in request at \$5½ to \$6, with little disposition to sell at those figures.—Beach & Paxton is saleable at \$60, with little or none in the market. Peytona is enquired for at \$35 to \$40. It is obtained with difficulty, and might probably, be sold for \$40. Madison is offered for \$25 to \$30. There is little doing in Geller or La Crosse. Hawley, in Spring Valley is looking up, and is reported as having been sold at \$15 to \$20. Hazel Green has advanced a shade in consequence of favorable indications. It may be quoted at \$4.

## ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Asked		Bid	Asked
Amador	—	5	Heath	—	10
Atlantia	2	—	Live Yankee	8	10
Arcade	6	10	Lord Byron	12	—
Antelope	—	375	Main Esmeralda	55	—
Alturus	15	—	New Esmeralda Consol.	—	15
Atlas	5	10	Newton	—	50
Bright Star	15	—	Nevada	—	60
Bamboo	125	—	Old Winnemucca	—	5
Climax	—	10	Pacific	—	5
Chihuahua	20	25	Pera	—	8
Del Monte	—	70	Pride of Antelope	—	5
Dargan	—	9	Pera (two ft. to the share)	8	10
East Essex Ex. Ural	10	—	Real del Monte	—	70
Fallstaff	4	4	Strawberry	—	20
Fallstaff, Consolidation	4	5	Silver Hill	—	45
Fresno	9	9	St. Louis	—	12
Falls of Clyde	—	4	Union Tunnel	—	20
Great Eastern	—	4	Utah	—	120
General Hooker	—	40	Union Tunnel	—	175
General Jackson	13½	14	Ural	—	600
Garibaldi	60	—	Ural Extension	—	10
Golden Harvest	5	5	William Tell	—	2½
Hanover	12	25	Wide West	—	400
			X-Eliza and Constantinople consolidated	—	1½



[CONTINUED FROM 2nd PAGE.]

if this was the case, the film was so small as not to be perceptible."

## [REMOVING AMALGAM AND CLEANING OUT ARRASTRES.]

'*Raspando*' (scraping) is the name given to the operation of removing the amalgam of silver and gold from the arrastres. It is done as follows. At the end of about every quarter, or sometimes only half-year, according to the quality of the ores being ground, after the arrastres have been discharged, the workmen proceed to scrape all the stuff from the interstices between the stones forming the bottom, which they do with hooked pieces of iron. The stuff removed is a mixture of coarse pieces of stones—are very finely ground—and amalgam of silver and gold. If the arrastre be entirely worn out, the whole bottom is removed and everything well scraped and cleaned, when a new bottom is again put in.

That which has been collected from the bottom is next well washed by hand, in bowls, in a tank filled with water. A certain portion of the stuff to be washed being placed in the bowl, there is then added a small portion of mercury for the purpose of collecting the finer particles of amalgam, and prevent them, as much as possible, from being washed away by the water. The bowl is now moved about in the water in such a way as will best favour the collection of the heavy amalgam and the removal of the lighter or earthy particles which are collected in the bottom of the tank, and is again washed on an inclined plain called a "*Planilla*," so as to obtain as much as possible of the precious amalgam. Still, some of this is in such a fine state of division, from the long-continued action of the grinding stones, that much of it is lost even by the second washing, and no method has yet been invented by which the last traces of this finely divided portion can be saved. The amalgam, after having been collected and cleaned, is freed from as much mercury as possible by being pressed in a leather bag; the dry amalgam is next burned (as we shall describe further on) to expel the remaining portion of the mercury, when an alloy of gold and silver remains. This is next removed to the Government melting and assay office to be melted into bars and assayed, before being sent to the mint to be "*parted*." This alloy is termed "*Plata mixta*" (mixed silver.)

## LOSS OF GOLD.

By this method of grinding there is still a large loss of gold. From 25 to 33 per cent. on the assay may be taken as an average, and it is said by some to be as high as 40 per cent. The whole of this loss has never been satisfactorily accounted for; but there is always a certain portion washed away in the form of very fine amalgam in washing the stuff from the bottom of the arrastres. The silver obtained from the treatment in the patio always contains a certain amount of gold, and the "*Polvillos*," which are the metallic portions (principally sulphides of iron rich in silver) remaining from the washing of a torta, always contain gold. These "*Polvillos*" are treated a second time to retain whatever gold and silver they may hold; but they will not yield them by the common method, without a preliminary operation. I think it quite probable that the gold may exist in these *Polvillos* as a sub-sulphide.

## LOSS OF MERCURY IN THE ARRASTRES.

In many works which treat on this subject it is stated that it is only the native metals that are taken up or extracted in the arrastres, and the "*Asogerros*" (amalgamators) in general think that to amalgamate any quantity of the precious metals an equivalent weight of mercury must be sacrificed. It is, however, very evident that in the arrastres the mercury actually acts on the sulphide of silver, forming metallic silver and sulphide of mercury. The following gives the details of an actual result obtained in a reduction works at Guanajuato. The amalgam added to the arrastre was 70 lbs., and was composed of 14 lbs. of silver and 56 lbs. of mercury:—

Additional mercury added during the whole time of grinding (exclusive of above).....	330 lbs.
Mercury in amalgam added.....	56 "
"Plata mixta" (gold and silver) obtained, including the above 14 lbs.....	84 "

Amalgam which ought to have been produced... 470 lbs.  
But there were only obtained 400 lbs., which was composed 84 lbs. of gold and silver (plata mixta) and 316 lbs. of mer-

cury; which, deducted from 386, the total number of pounds added, leaves a loss of 70 lbs. Now the alloy contained 18 lbs. of gold, which being in the metallic state in the ore would combine with the mercury without loss of the latter. Consequently, if we subtract this 18 lbs. of gold from 84 lbs. (the total alloy) there will remain 66 lbs. of silver. Thus we have a loss of as near as can be one pound of mercury for every pound of silver taken up (nearly equivalent proportions,) the difference being easily accounted for by mechanical loss in washing, burning, &c. Again, the ores worked in Guanajuato contain but little or no native silver, the gold only being in that form; so that it can only be the slow reduction of the sulphide of silver, that causes the loss. If the ores ground contain much native silver, then the loss of mercury will be less in proportion. Or, if copper amalgam in place of that of silver be added to the arrastres at the commencement of the grinding, the copper will in a short time disappear, and the loss of mercury will be somewhat diminished.

## SINGULAR AND INTERESTING AMALGAMATING PROCESS.

The reduction of sulphide of silver by mercury is a very curious fact, and one which I believe has been pointed out before. Still the following statements may be interesting. I took a small piece of pure red sulphide of silver and ground it dry in a clean porcelain mortar for about ten minutes with a small portion of mercury. At the end of this time the mercury contained a considerable quantity of silver, which could only have come from the reduction of the sulphide. In conducting this experiment, it is curious to note that after having ground the two substances together for a few seconds, the whole of the sulphide of silver apparently disappeared, and the mercury had all the appearance of being highly charged with silver (of amalgam) and spread itself in the form of a paste round the interior of the mortar; but on adding water to wash out what we thought was a pure amalgam, we were disappointed at finding the mercury again assuming the globular form, having only taken up a small portion of the silver, whilst the remaining undecomposed sulphide of silver mixed with the water. This circumstance, I think, can only be explained by the mercury actually dissolving the sulphide of silver, which apparently can only take place in the dry state.

[TO BE CONTINUED.]

**COPPER SPECIMENS.**—We acknowledge the reception of some very fine specimens of copper ore—green carbonate—showing much native copper, from Mr. GEO. W. HODGKINS, of Taylor's Ranch, (Indian Valley.) The lead is located about 14 miles from the Valley, and was discovered in June last. The company, known as the "Mountain Meadow Copper Mining Co.," are now running a tunnel, which has already been driven 125 feet into the hill, for the purpose of thoroughly developing the lead. The specimens before us are certainly indicative of a very rich mine.

**GOLD NEAR BROOKFIELD, MASS.**—We clip the following from the Hampshire Gazette; Mr. Trusdell, of Warren, has discovered something approximating to a gold mine, on the road between Warren and Brookfield. He has six or eight men engaged upon a vein of rock, which somewhat resembles the quartz of California and contains some kind of ore. It is very hard and much heavier than ordinary rock. Very many people have been attracted to the spot; but, as Mr. Trusdell holds possession of the mine, if it be one, there is not much chance for others to stake off claims at present. Those at work upon the vein are confident they have struck a gold bed.

**TREASURE BY THE GOLDEN AGE.**—The amount of treasure shipped by the steamer Golden Age, Monday, was \$872,304 31, consigned as follows:—

To England.....	\$711,742 66
To New York.....	154,561 65
To Panama.....	5,000 00

**RICH ORE.**—Some rich specimens of silver ore from the Sheba and Ben Franklin leads, Humboldt District, may be seen at the office of H. Critcher, Stockbroker, 211 Montgomery St., and at Mr. W. P. Denkla, 608 Montgomery St. at Kenney & Alexander's Bookstore. They are a portion of the specimens alluded to in our Editorial notice of the Humboldt mines.

## Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - - Proprietors.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOGRAPHY and ELECTROTYPING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seal for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the Press, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the Press for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.



LOWER CALIFORNIA

Colonization and Mining Company.

THE AGENTS SENT TO MEXICO BY the above Company having returned per steamer Oregon; after having secured a tract of upwards of

**125,000 Acres**  
OF RICH AGRICULTURAL LAND,  
and a valuable silver Mine,

The Company is now prepared to furnish exact information to Colonists who have already engaged, or those about to engage in this

SPLENDID ENTERPRISE.

It proposes to send a vessel about the first of March next, and there being but a limited number of shares

NO TIME SHOULD BE LOST BY COLONISTS.

Farmers Miners and Mechanics,

With families are particularly invited by the authorities of the Territory. The land selected, in point of fertility of soil, is not excelled on the Continent. The climate is unsurpassed in the world. The richest Silver Mines known to exist in the Territory are in the immediate vicinity and bordering on the agricultural lands of the Colony.

N. B. Bear in mind that a share costs, at present, only \$200, which entitles the holder to free transportation for self, family, and articles of personal use and an equal share in the land, the Company's Silver Mine, etc. the whole enterprise, being for the mutual benefit of members only.

Full information can be had, and Mineral and Cotton Specimens seen, by applying at the Office of the Company, North-west corner of Clay and Front Street.

BOARD OF TRUSTEES.

A. G. RANDALL, President.  
CAPT. JOHN H. BELL, V. President.  
O. F. GEHRKE, Secretary.

Trustees.—L. F. LOWLAND, ISAAC TAYLOR, M. D. MATHEWSON, H. C. PATRIDGE, I. ROWELL, M. D.  
Committee on Survey.—E. RICHARDS, Special Agent;  
Capt. R. C. ANDREWS, Surveyor.

LEANDER RANSOM,  
Civil Engineer  
AND  
SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms.—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

HAYNES & LAWTON,  
IMPORTERS AND DEALERS IN

CROCKERY,  
GLASS WARE,

FRENCH CHINA,  
Coal Oil Lamps, Table Cutlery,

CLOCKS,

Silver Plated and Britannia Ware,  
ETC., ETC., ETC.

NO. 516 SANSOME STREET,

[CORNER OF MERCHANT.]

no16

SAN FRANCISCO.

4f

Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,

No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office. no 13 6mo

A. ROMAN & Co.,

WHOLESALE AND RETAIL

Book Establishment,

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals. Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigeot on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Philips. Miners' Companion and Guide, compiled by Silversmiths.

Assayers' Guide; or Practical Directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Liver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines. Weissbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables. Fresenius' Chemical Analysis.

Together with many other works in this and similar lines

Books imported to order on short notice.

A. ROMAN & Co.

417 & 419 Montgomery Street.

READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—(Evening Bulletin, Aug. 4.)

THEN THIS!

Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

Gird's Budding Knife.

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentees), San Francisco

sept-3m

The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

News Stand,

AND A LARGE

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments & Musical Merchandise SHEET MUSIC & MUSICAL BOOKS.

GENUINE ROMAN STRINGS, &c.,

Light's New Patent Insulated Iron Frame is put into all of

LIGHTS & BRADBURY'S OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

In tone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

MELODEONS AND HARMONIUMS,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN,

Warranted superior to all others.

Send for a catalogue and Price List.

oct

A. KOHLER, Agent.

To Mill Owners.

WANTED, by a person fully competent to the position, a situation as Mining SUPERINTENDENT in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assorter of Copper Ore. He can give ample testimonials as to his capacity for the position he seeks.

Apply at this Office.

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gonges, Hoses and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."

SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR

FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

LATEST IMPROVEMENT

in Ladies' Buckles.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERIK REICHEL,

Manufacturing Jeweler,

620 Merchant street, San Francisco.

GREAT REDUCTION

IN PRICES.

STANFORD BROTHERS,

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPEER OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. apl6f

50 lbs. MARINE AND

Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,  
G. T. FOUQUE, Superintendent.

WORKS, North Beach; Office, 318 California st., San Francisco.

WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 611 Market street,  
Opposite Battery, San Francisco.

REMOVAL.

OFFICE OF THE PACIFIC METALLURGICAL Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER ORES.—Highest market prices advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
318 California street, near Sansome, up stairs.



## SPECIAL NOTICE.

**OFFICE OF OPHIR SILVER MINING CO.,** San Francisco, March 6th 1863.—A dividend on the capital stock of this Company has been declared, payable on and after the 9th inst. The transfer books will be closed from this date until the 9th inst.

mar6 THOS. J. LAMB, Secretary.

## New Style of Lady's Buckle.

W. BOHM, INVENTOR & PATENTEE

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It excels all other buckles in

## Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of

BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH, BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 1 Street, Sacramento.

Every Buckle sold will be guaranteed as to its Strength and Durability. W. BOHM, Patentee.

## Instruction in Assaying, Etc.]

A SCIENTIFIC AND PRACTICAL CHEMIST NOT HAVING the whole of his time occupied with his present business, is prepared to teach the various branches of Chemistry and Metallurgy, is willing to teach the method of assaying Gold, Silver and Copper, alone, or to teach the regular systematic course of Qualitative or Quantitative Chemistry

Address, T. P.  
Post Office, Box No. 167.

**WANTED** by an Intelligent and active young man a Situation by which he may obtain an honest livelihood. He is about 18 years of age, and is a good penman. Enquire at this office.

## Miners' Foundry

—AND—

## MACHINE WORKS,

First St., between Howard & Folsom,  
SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

STEAM ENGINES AND BOILERS, FLOUR, SAW AND QUARTZ MILL MACHINERY, MINING PUMPS, AMALGAMATORS, RETORTS, ETC., ETC.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING.

San Francisco, February 23, 1863.

## VULCAN IRON WORKS CO.

P. TORQUET.....MANAGER.

R. IVERS. C. R. STEIGER. S. AITKEN.

## Steam Engine Builders,

Boiler Makers, Iron Founders and General Engineers,

Nos. 137 & 139 FIRST STREET, ---- SAN FRANCISCO.

STEAMBOAT MACHINERY built and repaired; also Saw, Flour and Quartz Mills, Pumping and Mining Machinery, etc., etc., etc., etc.

Proprietors of Morse's Patent Fire Grates, JOYAL, FOURNEYTON and other Turbine Water Wheels, with latest improvements.

## PALMER, HANSCOM &amp; CO.,

## GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

## To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms, for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. W. A. PALMER.

## FULTON FOUNDRY &amp; IRON WORKS

HINCKLEY & CO.,

MANUFACTURERS OF

## Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,

FIRST STREET,

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.

PATTERN MAKING in all its various forms. Prices low. D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

## TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

## THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300), and to any kind of machinery, will

Save in Transportation. Material and Labor, from 25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

W. This Wheel is fully GUARANTEED. Jan 19-1f

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, (late City and County Assessor.)

REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## SQUARZA'S PUNCH.

HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff st., near Sacramento.  
Branch at 406 Montgomery street. my30

## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of February, 1863.

March 2nd, ---- Steamer Golden Age.

March 11th, ----- Steamer Sonora.

March 21st, --- Steamer Constitution.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.  
Je4 Corner of Sacramento and Leidesdorff sts.

## PEOPLE'S

## Steamship Line!

CONNECTING

CALIFORNIA AND NEW YORK,  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

## MOSES TAYLOR,

E. HOWES ..... COMMANDER,

Will be dispatched for

San Juan del Sur,

From Mission street Wharf.

Punctually at 9 o'clock, A. M., on

WEDNESDAY, --- MARCH 11. 1863.

Connecting at GREYTOWN with the Splendid Steamship

ILLINOIS ..... 2500 Tons.

Reduced rates of Passage and quick trips are secured by the re opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers

For further information apply to

I. K. ROBERTS, Agent,  
a20 No. 407 Washington Street, opp. Post Office.

## DONAHUE'S

## Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost. PETER DONAHUE

## Holiday Presents!

IN

WATCHES,

DIAMONDS,

JEWELRY AND

SILVER WARE,

AT

## BRAVERMAN &amp; LEVY'S,

621 Wasnington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. ALSO,

FRENCH CLOCKS,

AND

PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY,  
No. 621 Washington Street,  
Facing Maguire's Opera House  
Dec 29 1m

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

no16-1f

ZENAS WHEELER.

## DEETKEN'S

## Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

CLEAR GOLD BEARING SULPHURETS WORKED AT \$20 PER TON. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov8-3m

## JULIUS SILVERSMITH,

## Commissioner for Nevada Territory,

OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets.,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

## LEWIS COFFEY AND RISDON,

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

## JAMES PHELAN,

(LATE J. & M. PHELAN.)

IMPORTER AND JOBBER,

## Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-1f.

## For Sale Cheap!

A HORIZONTAL STEAM ENGINE OF 4-Horse Power, Flue Boiler, in excellent order, capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,  
Federal Building, cor. Battery and Washington Sts  
Room, No. 23.

## THEODOR KALLENBERG

## Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. No. 4 Sansome street, corner Market, au7-3m San Francisco.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, MARCH 16. 1863.

NO. 20.

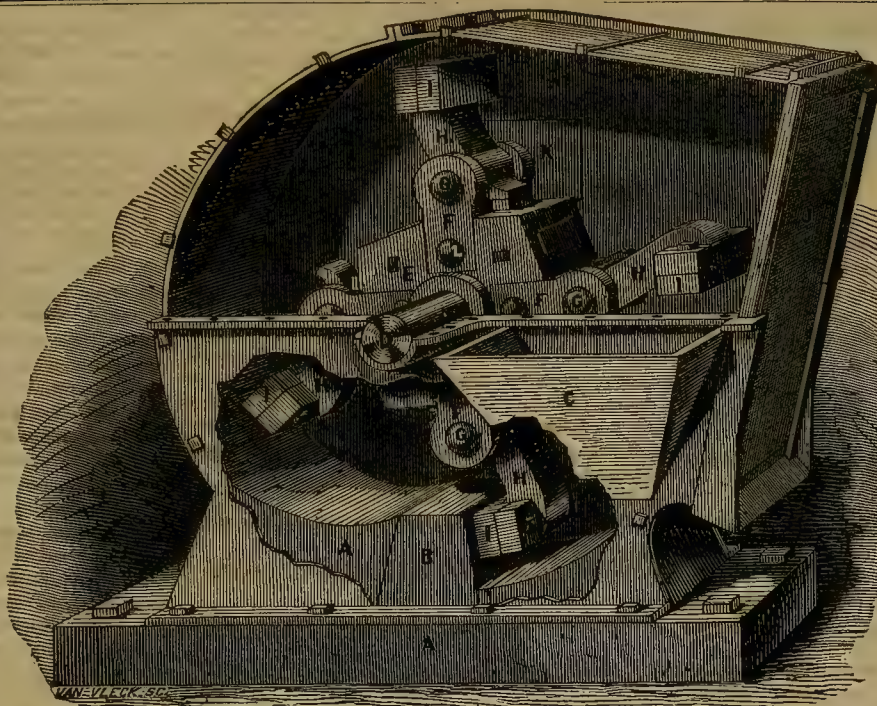
The accompanying engraving is a very correct and well executed illustration of "POND'S PATENT QUARTZ CRUSHER," of which we have hitherto made several notices. This is one of the most original conceptions in the line of quartz crushing machinery, which has ever been introduced to the public, since the first application of the original, ironbound wooden stamps. Mr. Pond has gone back to first principles and produced a machine, involving the most economical use of power, and combining at the same time simplicity and cheapness of construction, efficiency of action, compactness and lightness of metal, etc., which places it in most favorable contrast with anything of the kind heretofore introduced.

The production of this machine has not been the result of a casual thought, but of long continued study and most diligent practice and experiment. The inventor has had the advantage, in these experiments, of several years experience as a quartz miner, and a thorough practical education. He has nearly worn out his original working model, which, as an experiment, was but imperfectly constructed, in studying its principles, and testing, in the most thorough manner, every part and parcel of the machine, until he has at length produced one wherein he can devise no improvement, or discover any defect. We have watched with much interest the gradual development of the present machine, as piece by piece, it has come from the hands of the workmen, each part carefully studied and improved from the original model, until its completeness was reached, and the machine set in motion at the Miners' Foundry, in this city, where these machines are now being constructed. We should have given a full description of it at an earlier day, but we have been waiting for the accompanying illustration, by the aid of which we might be able to give our readers a more clear understanding of the principles of the machine.

#### THE ILLUSTRATION.

The above illustration represents the machine with a portion of its side casing removed. When it is ready for operation it is closed as tightly as possible on all sides except on the right hand in the engraving, marked J, where a screen of any required fineness is placed. When the rock is to be crushed dry, this screen, or rather that end of the machine is fitted into a tight box of any required dimensions, for receiving the pulverized quartz which finds its way through the meshes of the screen in the shape of an impalpable powder.

A A is the bed plate upon which the machine is constructed,



POND'S PATENT QUARTZ CRUSHER.

ed, B being a movable die, fitted into the bed-plate, against which the hammers strike, as seen in the lower one in the engraving. To the shaft D is firmly fastened a massive center piece, E, which is cast with jaws or grooves for the arms F, F, F, they being held in their places by bolts as at L. The shanks of the hammers H, H, H, are held in their places by hardened steel bolts at G, G, G, and so constructed that they can move backward after striking the die B, pass freely over it, and immediately by their centrifugal force fly out into position as represented in the engraving.

On the face of each Hammer is fastened a Shoe, I, made either of cast or wrought iron, or steel, and hardened. The Machine when running is entirely enclosed by the sides and rim. The rock is fed into the Box, C, drops immediately in front of the Die, where it is crushed and carried over on to the Screen, J, by the motion and shape of the Hammers, where the fine material passes out, and the coarse returned in front of the Die, is again crushed and thrown over until it is all fine enough to pass out through the Screen, which may be of any required fineness.

The amount this Machine (four foot) will crush is from Twelve to Twenty Tons per Day, depending upon the speed it runs and the power expended. The machine can be used either for Wet or Dry Work. For crushing Twelve Tons per Day it only requires Five Horse power. It is easily

kept in order; the wear and tear being a less cost per ton than in a Stamp Mill.

Great numbers of persons, experienced in quartz crushing, have witnessed the operation of this machine, and so far as we have heard, (and we have conversed upon the subject with many) all have expressed themselves most favorably impressed with regard to its working.

We understand that the machine will soon have a fair trial by the side of one of the mammoth Mills on the Fremont (Mariposa) Estate. Quartz Miners, visiting the city should not fail to call and examine this machine, as well as several improved descriptions of amalgamating pans, which are constantly in operation, every day, at the Miners' Foundry, on First street, where others are in course of construction.

These Machines are so simple in their construction that any one can put them together after they have been transported to the locality for which they are designed. They are made in three sizes, as follows:

A 2-foot Machine	will crush from 2 to 3 tons;	weight 1,000 lbs.	cost \$500
A 3-foot "	" 5 to 8 "	" 3,500 lbs.	cost 750
A 4-foot "	" 12 to 20 "	" 5,500 lbs.	cost 950

The 2 Foot size is for a Prospecting Machine; the other two sizes can be set up at a mill for fifty dollars (exclusive of freight) ready to run.

MELTING STEEL IN LARGE MASSES.—Mr. Alfred Supre, of Paris has discovered, that by covering steel with bottle glass, or the slag of a charcoal smelting furnace, it may be melted in a reverberatory furnace easily and rapidly, and without losing any of its qualities—two tons may be melted at once in the same furnace. Although the furnace in which the experiments were tried was defective, it was found that in consequence of crucibles being dispensed with, and less fuel being required, a considerable economy was effected.

THE ART OF PRINTING.—A jubilee will soon take place in Vienna, in honor of the four hundred years existence of printing in that city. The first Vienna printer, Ulrich Hapn, opened his printing office in 1432, but did not succeed, and emigrated to Rome. He was the cause of the Emperor Frederic IV. bestowing a privilege on the printer, in the year 1468, which placed them in equal rank with noblemen and scholars, and permitted them to wear a sword,

The London Rothschild has had a Carrara marble staircase put in his house at a cost of \$150,000



[FROM THE LONDON "MINING AND SMELTING MAGAZINE."]  
THE MEXICAN METHOD OF AMALGAMATION.

BY JAMES NAPIER, JUN., F. C. S.  
Late Chemist and Assayer to the Guanajuato Mint, Mexico.

[CONTINUED.]

The materials absolutely necessary for the reduction of silver ores in the *Patio* are but few, namely—sulphate of copper, or *magistral*, common salt, chloride of sodium and mercury. But the various modifications introduced have led to the employment of other ingredients, such as precipitated copper, copper amalgam, and fine amalgam.

1.—*Magistral*, or *Sulphate of Copper*.—This is manufactured from the sulphide of copper, mines of which exist in many parts of Mexico; but the district of *Tepezala*, about 18 or 20 leagues southeast of Zacatecas, and about 65 from Guanajuato, perhaps supplies the largest quantities of this ore for the manufacture of the sulphate. The following shows the per centage of copper contained in various samples from this district:—

Copper per. cent.

13.00  
7.47  
13.75  
9.00  
12.50  
10.50  
8.60  
9.40  
8.73

—10.32 mean percentage of copper.

There are many much richer samples found in this locality, but these give a very fair idea of the class of ores generally sent to the various reduction works for the manufacture of the sulphate.

The sulphide of copper when brought to the haciendas is, like the silver ore, first reduced to a fine powder in the *arrastres*; but in grinding this, much more is charged to the *arrastres* at once, and they are discharged twice in the 24 hours. The ground ore is removed from the *arrastre* to a small enclosure, where the water, with which it was ground, is allowed to evaporate spontaneously, and where it is allowed to remain exposed to the air for a length of time—sometimes two years—before being calcined. It is stated the longer it is exposed to the air, the more sulphate it will yield. I have examined various samples which had been exposed for a length of time for sulphates, but have never found any.

The furnaces in which this is calcined are called *comalillos*. They have a double hearth; the roof is almost quite flat; and the fire-place is in the centre, and runs longitudinally, so that the flame plays sideways. About eight arrobas of the ground ore (having previously had a few handfuls of common salt mixed with it) is charged on each hearth. The fire is then gradually increased, and the ore kept almost constantly stirred for the space of from six to eight hours, when the doors and other openings are closed to exclude the air. When the whole is sufficiently cold to ensure no further calcination, the ore is drawn through holes in the bottom of the furnace into a place made for its reception.

The percentage of sulphate of copper obtained by this method of calcination depends very much on the care which has been bestowed on the operation by the workmen. The following table gives the details of this operation as obtained in a few of the reduction works in Guanajuato.

Name of Haciendas.	Sulphates per cent.		Total per cent of sulphates analysed of.	Copper not analysed of.		Ore before calcining.
	Copper	Iron		as sulphide.	as oxide.	
San Joaquin	40.99	9.73	50.72	4.50	2.11	15.90
San Nicolas	20.50	12.38	32.88	2.50	.23	7.83
Granaditas	34.37	6.95	41.32	3.78	2.47	14.00
Salgado	24.64	7.40	32.04	—	2.50	8.00
Pardo	33.18	6.75	39.93	3.00	3.50	12.80
Pastita	31.62	9.05	40.67	.70	.15	8.75

In this table I give the amount of sulphate of iron as well as of the copper, because it is certain that the sulphate of iron also acts in the process of reduction, although not so perfectly as the sulphate of copper. A little of the copper given above as sulphate, will be in the state of chloride, formed by the decomposition of the small portion of salt added to the ore before calcination.

In some districts sulphate of iron is mixed with the sulphide of copper previous to calcination. By doing this, ores containing considerable quantities of carbonate and oxide of

copper may be used for the manufacture of *magistral*. The method employed by the amalgamators to know good from bad *magistral*, or rather to know the strength of it, is very rude. They take a small portion of the calcined ore in the hand; then gradually immerse the hand in water, and from the intensity of the heat given out, they judge of the quantity of sulphate the sample is likely to contain, and how much will have to be used in the process of reduction.

They also like to employ the *magistral* as soon after calcination as possible, as by standing it absorbs moisture from the atmosphere, and a larger quantity is required.

All the sulphate of copper produced in the "*apartado*"\* of the mint, from the precipitation of the sulphate of silver by copper plates, is used in the reduction works in place of calcined copper pyrites. In this case it is easy to calculate how much must be added to a *torta*, and in using this *torta* is not augmented so much in bulk as when calcined pyrites is used.

2.—*Salt*.—There are various places in the Republic of Mexico where this article is obtained, but the principal localities are *Peuon blanco* and *Salinas*. The former contains both salt lakes and springs; the latter were discovered by an English gentleman, Mr. Pollard, who was employed at this locality in extracting the salt from the earth (*Sal-tierra*) of the lakes. The following analysis made at the *Ecole des Mines, Paris*, is of the salt earth from *Peuon blanco*.

Chloride of Sodium.....	19.00	} soluble in water.
Sulphate of Soda.....	2.20	
Carbonate of Lime.....	13.60	} insoluble in water.
Carbonate of Magnesia.....	1.60	
Oxide of Iron.....	9.80	
Clay and Sand.....	46.20	
Water and Organic matter....	7.60	

100,000

This class of salt earth was formerly used without refining in the reduction works of Zacatecas, but the augmentation in the bulk of the *tortas* in consequence of so much having to be added for the purpose of obtaining the necessary amount of chloride of sodium, was very inconvenient, and its use has consequently been given up. The quantity of chloride of sodium contained in the purified salt from *Peuon blanco* averages from 80 to 85 per cent., the rest being principally sulphate of soda.

In the district of *Salinas* the salt is also found in springs. Here English and German workmen are employed to extract the salt, which they do by evaporation in large pans. The following are analyses of salt from this district, and such as is sent to the various reduction works:—

	No. 1.	No. 2.	No. 3.	No. 4.
Chloride of Sodium....	90.422	91.141	86.853	96.623
" Magnesium.....	2.520	2.538	.044	.008
" Calcium.....	1.310	1.574	.125	.114
Sulphate of Potash....	3.556	3.141	.029	trace.
" Soda.....	—	—	12.949	3.555
" Lime.....	2.192	1.606	—	—

100.000 100.000 100.000 100.000

The purest salt that is met with in Mexico is sea salt, which I have found to contain, on various occasions, as much as 98.50 per cent. of chloride of sodium; but the great cost of carriage of this salt from the coast to the interior, makes it too costly to be generally used in the reduction of silver ores.

3.—*Mercury*.—This metal, the consumption of which is very large, is almost entirely imported, although it exists in many localities in Mexico. I have seen beautiful specimens of cinnabar—red sulphide of mercury—from Mazapil, and also from the Gigante near Guanajuato, where some years ago a company was projected for the reduction of the ores; but works were never established, why I do not know. However, considerable quantities of mercury have, from time to time, been obtained from these mines. The district of El Doctor, about 150 miles to the north of the city of Mexico, has also yielded a certain quantity of this metal.

4.—*Lime*.—This is not a necessary ingredient in the *Patio* amalgamation. It is only used when an excess of *magistral* has been employed, and is then added in a caustic state, its object being to precipitate the excess of copper employed. Wood ashes are frequently added for this purpose instead of lime.

\* The name given to the Department for separating gold from silver.

5.—*Copper Precipitate*.—In many of the reduction works this is used in preference to lime for counteracting the action of an excess of sulphide of copper added to a *torta*, which it does by reducing the protochloride of copper to the state of subchloride. It is prepared by suspending a mercury bottle in a weak solution of sulphate of copper when the copper is precipitated in the form of a very fine powder. The use of copper precipitate in the *Patio* amalgamation was first proposed by Mr. Louckner, who also in conjunction with Mr. Henry Mackintosh, obtained a patent in Mexico for the use of *Copper Amalgam* in the *tortas*. The object of this was to save mercury; and if used skilfully no doubt would; the patent, however, was evaded in many instances by using precipitated copper instead of amalgam. The amalgam used by Messrs. Louckner and Mackintosh contained about 30 per cent. of copper. *Zinc amalgam* is also at times used with good results.

TREATMENT OF THE GROUND ORE (LAMA) IN THE PATIO TO OBTAIN THE SILVER.

The *Patio* is a large court yard well paved with flag carefully cemented together to prevent, as much as possible the mercury passing between them. It is made on a slight incline, so that superfluous water, from rain; &c., may run off easily.

The ground ore from the *arrastres* is collected in a place called a *cajete* until it reaches a sufficient quantity to form a *torta* or heap—which generally contains from 50 to 60 montones—60 being the general size. The monton, however, varies in different places, as under—

In Guanajuato, a monton contains....	32	quinatales.*
" Real del Monte	} .....	30 "
" Pachuca and Saco		
" Zacatecas and Sombretete	20	"
" Fresnillo	18	"
" Bolanos	15	"

When the necessary amount has been collected in the *cajete*, it is removed to a space prepared for it in the body of the *Patio*. This is an inclosure about 30 feet in diameter made by piling two or three rafters on each other, and securing them in their place by large stones; the joints being made good by horse-dung. The lama should not be much more than a foot thick; for the thinner it is, the quicker will the operation of reduction go on. Here it is allowed to remain till as much water evaporates from it as to leave rather a thin mud. This condition being arrived at, the *torta* is added (which operation is called *Ensabmorar*) in the proportion of from three to five per cent, on the weight of the ore; this, however, will depend somewhat on the quality of the salt used, and on the nature of the ores under treatment; but I now speak of salt such as that referred to in the analyses given. It is well known that those who use the sea salt, up to a certain point, will get out the silver in the shortest time. Some amalgamators will never use more than 10 per cent. salt; although they are quite aware the operation would be completed six or eight days sooner had 5 per cent. been used; but, the time gained will not compensate for the extra salt used. My friend Don Juan B. Castelazo adds by mistake to a *torta* double the quantity of salt necessary, and the consequence was that the operation was concluded in ten days instead of about 25—the usual time required in ordinary ores.

When the requisite quantity of salt has been added, the *torta* receives a *repaso* or *treading* (which will be described further on.) It is then allowed to rest till the following day when the whole of the salt ought to be in solution, and thoroughly mixed with the lama.

*Incorporar*, (addition of *Magistral* and *Mercury*).—The day after the salt has been added, they proceed (after bringing the *torta* to a proper consistency with water,) to add the necessary quantity of *magistral*. If this be of an average quality, for instance like that given in the preceding analyses, it is added in the proportion of from half to three-quarters per cent. on the ore, or about an arroba to each monton of ore in the *torta*. It is thrown as evenly as possible over the whole surface of the mass by means of wooden shovels, and when the whole has been added, the mules are admitted to *repasar*—*tread*—for about an hour for the purpose of mixing the whole as thoroughly as possible. When this has been completed, the mercury is then added in the proportion of from 3½ to 4 lbs. to every mark (half pound) of silver.

[CONTINUED ON 6th PAGE.]

\* About 22 quintals make one ton.



# MINING AND SCIENTIFIC PRESS.

## SAN FRANCISCO MINING NOTICES.

### ASSESSMENTS LEVIED.

Assessments upon Mining Stocks have been levied as follows:—

Parabaldi.—Assessment of \$1 per share, levied March 21.

Intro.—Assessment of \$1 per share, levied Feb. 23, payable March 23.

Silver Quartz Mill Co.—Assessment of 5 per cent. levied Feb. 23, payable March 28.

Idylmetia.—Assessment of 25 cts. per share, levied Feb. 23, payable March 10.

Quave.—Assessment of \$1 levied Feb. 22, payable March 10.

Rogers.—Assessment of \$5 per share levied Feb. 4, payable March 15.

Sam Wright.—Assessment of 50 cts. per share levied March 2, payable immediately, delinquents to be sold Apr. 2.

Napoleon (copper).—Assessments of \$3 per share levied March 3, payable in 30 days.

Golden Age.—Assessment of one dollar per share levied March 24, payable March 26.

Washoe Gold & Silver.—An assessment of 2 per cent. capital stock was levied Feb. 16, payable Apr. 1.

Rhodes' Diggings.—Assessment of 25 cts. per share levied Feb. 26, payable March 5.

Texas Co., at a Meeting held Feb. 14, levied an assessment of one dollar per share, payable to the Secretary in Virginia City.

Santa Rosa Co.—February assessment of 20 cents per share now due and payable.

Madison Co.—An assessment, two dollars per share, was levied Feb. 17, payable immediately, at Office, 600 Merchant St.

Union Co.—An assessment of one dollar per share was levied February 16, payable on or before March 25.

Pena Co.—An assessment of \$3 per share was levied Feb. 6, one half payable March 1, balance April 15.

Cossuth Co., Devil's Gate District.—An assessment of 10 cts. per share was levied Feb. 7.

Constitution Company levied an assessment of 25 cts. per share, payable March 11, payable immediately.

Plata Oro Co. levied an assessment of five dollars per share, Feb. 9, payable at Office of the Secretary in Virginia City.

Plata Co. levied an assessment of 50 cts. per share, Feb. 2nd, payable at Office of the President.

Lamo Co. levied an assessment of 50 cts. per share, Feb. 9, payable on or before March 20, at 115 Cal. Street San Francisco, or at office in Carson City.

Hucker Co. levied an assessment of 25 cts. per share, Feb. 11, payable immediately at 608 Merchant St.

Fawley Co. levied an assessment of one dollar per share, Feb. 9, payable on or before March 12, to Superintendent at the mine, or Secretary at Office.

Late Range Co. levied an assessment of 50 cts. per share, Feb. 4, payable, March 15.

Cross G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 50 cents per share, Jan. 27, payable to the Secretary, at 502 Montgomery St.

Al Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to Supt.

Caudaloupe S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or to the Superintendent at the mine in Aurora, (Esmeralda.)

Pio Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cts. per share was levied Jan. 24, payable immediately.

Sonora Mining Co.—An assessment of 25 cents per share was levied Jan. 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 375 Mission St.

Mount David-on Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Aeratic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norcross.—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skae, at the Mine, on or before Feb. 25.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

Hale & Norcross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and O St., Virginia City.

Baltimore America Consolidated.—An assessment of 50 cents per share was levied, Jan. 5.

Savage.—An assessment of \$35 cents per share was levied, Jan. 7.

Hawley.—An assessment of \$1.00 per share was levied Feb. 9, payable March 12.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

### COMPANY MEETINGS.

Chs. Caney Co.—Special meeting of stockholders will be held on Wednesday, March 18, to consider the propriety of an increase of capital stock.

South Utah Co. will hold its annual meeting for election of Trustees, etc., at No. 608 Merchant St., March 20.

Nevada Co. will hold its annual meeting for electing Trustees, etc., at 608 Merchant St., March 20.

Annie Laurie Co. will hold its annual meeting for election of Trustees, etc., March 19.

### ASSESSMENT SALES.

Sales of Stock for non-payment of assessments are advertised to be sold as follows:—

Oriental Tunnel Co. will sell, on Saturday, Mar. 28.

Mars will institute proceedings against delinquents, Mar. 16th.

Planet will institute proceedings against delinquents Mar. 16th.

Meredith.—Annual meeting of stockholders will be held Monday, Mar. 16, at 2 P. M., at 712 Montgomery St.

Texas Co. will sell delinquent shares, on the 14 of March.

Meredith Co. will sell delinquent stock, March 2n.

Coso Co. will sell delinquent stock, March 18.

Moray Co. (V. City).—Suits for delinquent assessments will be commenced, March 14.

Michigan Co. (Gold Hill) will commence suits for delinquent assessments, March 16.

North Potosi Mining Co.—Sales delinquent stock will be made March 17.

Peytona G. & S. Mining Co.—Sales of delinquent stock will be made March 1st.

Cole Silver Mining Co.—Sales by Jerome Rice & Co., 327, Montgomery St., San Francisco, on the 25th of February.

Combination G. & S. Mining Co.—Sale by E. S. Spear & Co., at 433 California St., on the 10th day of March next.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

Desert Mining Co.—Shares of delinquent stockholders will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

### GENERAL NOTICES.

Yellow Jacket.—Corporate Deed now ready for signature at office of H. G. Maynard, Gold Hill, N. T.

Jenny Lind (Esmeralda).—Owners of ground in this Cot are requestes to call and sign deed of trust at 608 Merc. an St.

Mount Hope Co.—Persons claiming stock are requested to present title papers for examination till March 16.

U. S. Mining Co.—All persons claiming stock are requested to present title papers for examination at Nos. 7 & 8 Government House.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. E. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

THE SWEETZ Co., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Beach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This Journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

### EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

C. W. THOMAS, Plaining Mill, California street, facing the Mission R. R. Depot. San Francisco.

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., Importers of Wines and Liquors, S. E. cor. Front and Sacramento sts.

D. R. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner.



MRS. HALL'S VOLCANIC SMELTING FURNACE.

We would call the attention of our readers to the subjoined "card" in reference to the above invention. The well known metallurgical and scientific attainments of the gentleman whose name is thereto affixed, must attach much interest and importance to the document.

By reference to an advertisement of the proprietress in another column, it will be seen that she is desirous of making arrangements with some person of means, to erect a trial furnace, capable of smelting one or more tons of ore. We trust that some one of the many capitalists, to whom California has been generous, and who take an interest in the further development of her mineral resources, will come forward and furnish Mrs. H. with the means to give her invention a thorough, practical trial. Its success would lead to the most important results; while a failure, at the worst, would only involve the loss of a few hundred dollars in an attempt to solve a most interesting problem in practical metallurgy.

SAN FRANCISCO, MARCH 14, 1863.

MADAME:—In accordance with your polite request to give you my unbiased opinion concerning your ingenious device of a fuel, metal, and labor-saving smelting furnace; I have to particularize matters in detail in order to be understood, viz.:

The quadrangular dimension which you give your furnace outside, and the oval cavity for receiving the ore mixed up with crude lime and coals, is a contrivance well calculated to resist the inner pressure of the heat as well as to bring a considerable amount of ore into a very limited compass, to be acted upon by the intense heat thus concentrated and kept in this state up to the end of the process with a comparatively small consumption of fuel.

The moderate amount of steam, introduced by turns and the means of steam-pipes g and p, is decomposed into its constitutive parts, viz.: oxygen and hydrogen, performing this way in part the functions of a hydro-oxygen blow-pipe; the oxygen by its combining with the glowing coals augments their combustibility in a more rapid manner, and increases thus the intensity of the heat, which is still more augmented by the deflagrating hydrogen thus parted from the oxygen in the decomposed steam. Besides this change other decompositions and mutual associations also take place in this mysterious furnace, viz.: ores which are in an oxydized state, are thus forced, to give up their oxygen on the coals, which have a greater affinity for the same than any metal. By carbonates the intense heat volatilizes the carbonic acid, and by sulphates the lime depriving them of their sulphur, and combining with it as gypsum, and thus the reduction of the ore into a metallic state being complete, the fire can now freely act upon the metallic particles of the ore, which thus liquified, sink by their specific gravity to the bottom of the above mentioned cavity of the furnace and are collected in pure slugs below the aperture x.

Another attribute of great utility in your invention is the Condenser C, with the sieve O, which prevents the waste of any by the heat volatilized mineral or metal to escape through the chimney, and is collected in said condenser.

This process of reducing ores, is also a great deal accelerated by the abundantly administered air, forced from all sides into the furnace, through the judiciously distributed flues and draught holes, d, d, d, by which a great amount of oxygen, that indispensable requisite for the maintainance of the fire, is supplied with said atmospheric air, of which it forms a constituent part. If by the construction of your Smelting Furnace, on a large scale, said air flues could be put in such a position, as to conduct heated, instead of cold air into the furnace, the process would be considerably shortened and a still greater amount of fuel saved.

Having been a witness of your procedure from its beginning to its end, and seen the results of your labor, I am confident that your most clever device will revolutionise the old system of smelting ores, altogether.

Very Respectfully,  
Your Obed't Servant,

CHARLES HARASZTHY.

Mrs. ELIZA JANE HALL.

TREASURE RECEIPTS.—The amount of treasure receipts, from the interior during the ten days interim between the sailing of the two last steamers was, within a fraction of \$1,500,000; an unusually large amount for the season.

VALUABLE DISCOVERIES IN THE RUSS DISTRICT.

Mr. R. S. Whigham of this city, who has recently returned from the Russ district, has shown us a letter received from that region a few days since, which gives an extended report of the success of a prospecting party which started out from the camp of the Ida company on Owen's river, Tulare county, on the eastern slope of the Sierra Nevada, and about 100 miles south of Esmeralda. The party consisted of six. They left camp on the 26th of January, following the river in a north-easterly direction about 15 miles where they commenced prospecting. The result of which was the discovery and location of the following leads,—

The Jefferson, from 8 to 10 feet thick—argentiferous galena, galena in great abundance, rich in silver by assay.

Columbus—a gold bearing lead, in a granitic formation, from 20 to 30 inches thick—the lead rich, very friable, much decomposed, and abounds with fine gold in every part of it, as far as opened.

Chrysopolis, also gold-bearing, a well defined lead cropping out for hundreds of feet in extent, and showing gold wherever examined. The lead is about three feet thick. Oro Fino—gold much resembling the Chrysopolis, cropping out for many hundred feet, and showing fine gold abundantly on the surface.

These are all parallel ledges within a mile and a half of each other, and all convenient to the river and most eligibly located for working. The company have taken up a mill site and contemplate early efforts toward developing these discoveries. Timber and water plenty. We note these discoveries, as indicative of the extent of the still unexplored region of country east of the Sierras. The prospectors assert that there are a plenty more veins still left equally and perhaps more valuable than those already located.

The developments daily being made in every part of the State and on both sides of the mountains, are but cumulative evidence of the immensity of the yet undeveloped mineral wealth of the Pacific Coast, and may serve to give us some faint idea of the future wealth and industrial proportions which the golden State of California is destined to assume at no distant day.

LOCAL MINING EXCITEMENT.—It is said that some specimens, of silver ore have been picked up on California street, between Powell and Mason, which were taken out of the ledge of rock, now being dug away at that point in grading the street. Our "local" visited the locality but failed to discover any "ledge" or "indications" of silver. Those present stated that the "specimens" had all been taken away. According to the Morning Call, a quantitative assay made by Mr. Q. L. Hagberg, No. 420 Montgomery street, for J. R. Sprout, one of the claimants, shows 1.29-100 ounces of silver and 1.21-100 ounces of gold to the ton, the total value of which is \$38 32. This yield would not pay for working, but the company think if the outcroppings will pay even that much, better prospects may be developed by sinking a shaft, which will be done at once.

Somebody evidently has faith in the occurrence of silver ore at that locality, as a regular Stock Company has been formed, and the certificate of incorporation filled with the County Clerk. The ground claimed by the Company consists of the consolidated claims of a number of parties. The locality, beyond the limits of the street which belongs to the city, is all owned by private individuals, whose title will have to be purchased before any operations beyond "staking off" can be commenced.

QUICK WORK.—The Sonora, on her last trip to this city remained in port but 24 hours, during which time she discharged her large inward cargo, with passengers, baggage etc., and took on board 400 tons of coal for the down trip, and the ships stores necessary for the voyage, together with a full list of passengers. This is a degree of dispatch which we think must be without a parallel, and speaks well for the energy and system with which everything connected with this company is managed.

THE MOSES TAYLOR sailed promptly to her advertised hour, on the 11th instant, with an unusually large list of passengers. This boat has been put in the most perfect order throughout, and her passengers will doubtless have a most pleasant and speedy trip to the Isthmus, on their journey homeward.

COPPER SMELTING WORKS.

A company of San Francisco capitalists, has recently been incorporated with the view of erecting works for the reduction of copper ores on this coast. The company has purchased a tract of land about two miles above the junction of the Sacramento and San Joaquin rivers, upon the South bank of the latter. Among the names of the incorporators we notice some of our wealthiest and most enterprising citizens. The point selected for the works of the company is a most judicious one. It is within five miles of the Mount Diablo coal mines, and directly on the route which all the ores of the region drained by the Sacramento and San Joaquin rivers must take in reaching a market.

The company will probably put up but a single furnace to commence, which will be quite sufficient to thoroughly test the practicability of the project. The works will be erected and placed in operation under the general supervision of Mr. Price, a gentleman intimately acquainted with all the details of this intricate branch of business. Mr. Price will bring to the aid of the company the accumulated experience, which for many years has been in process of aggregation at Swansea, England, where this business has been reduced to as perfect a system and as closely economised as is practicable, at the present period of metallurgical knowledge.

Every element of success attainable on the Pacific Coast has been secured with the view to make the enterprise remunerative, if possible. The public spirited gentlemen who are advancing the capital for this operation are governed more by a desire to test the practicability of reduction works on this coast, than by a mere desire to realise a large percentage on their investment. Should success attend the effort, it will add a renewed impetus to our copper mining interest, and give value to a large proportion of ores now worthless in this market. The Company, at present, will limit their operations to a reduction of the ores to "regulus," and will not undertake any refining process until the preliminary one has resulted in success.

The shipment of treasure per Sonora was as follows:—	
To England.....	\$380,164 64
To New York.....	237,728 04
To Panama.....	5,000 00
	\$ 622,892 68
Previously this year.....	10,698,769 59
Total since Janutry 1st, 1863.....	\$11, 321,662 27
Corresponding period of 1862.....	7,376,179 10
Excess this year.....	\$3,945,483 17

MINING INTELLIGENCE.—Several of our city cotemporaries speaking of the Copper Smelting Works about to be erected near the junction of the Sacramento and San Joaquin rivers remarks that their proximity to the Mount Diablo Coal Mines will give "the new works a great advantage over those at Swansea and other places where the coal has to be procured at a great expense from abroad."

Our cotemporary, we apprehend, is not thoroughly posted. Instead of an advantage to be derived from the near proximity of "the New Works" to coal, their distance from that important material, and the great comparative cost of providing the same, will be found the chief obstacle to be encountered in making these works pay. The smelting works at Swansea, are located directly at the mouth of the coal mines, and nearly all the coal used in the furnaces are the screenings which are uneconomical, and would not pay for hauling to a market. Notwithstanding the disadvantages under which these works will go into operation, we nevertheless trust and believe, with our cotemporary that "this enterprise which is expected to be in successful operation within the next two months, will prove of great benefit to the copper mining interests of California.

"THE STOCK EXCHANGE BOARD."—The new Stock Exchange Association held their first meeting on Monday last at their rooms in Montgomery Block, and the following officers were elected: President, A. P. Sandford; Vice President, M. Livingston; Secretary, James H. Gager; Treasurer, T. D. Matthewson. There were 40 members present.

THERE is a scheme to construct another tunnel under the Alps, the point being settled at the Simplon. The total length of the proposed tunnel will be about 4506 metres.



## GENERAL MINING STOCK REPORT.

## REPORT OF SALES

At the San Francisco Mining Stock Board,  
For the week ending March 14, 1883.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2800	—	—	—	—	2900
Gould & Curry	4,800	4	500	3220	—	—	3260	3250	3200
Central	1,800	12	300	—	1650	—	—	—	1000
California	3,800	12	300	—	—	—	—	—	—
Chollar	5,800	4	300	650	—	—	400	450	—
Edison	2,800	4	400	170	—	165	—	175	200
Halo & Norcross	80	4	500	—	650	700	750	—	—
Sierra Nevada	3,000	1	300	87½	—	65	65	70	65
Danby	8,000	4	500	200	—	—	—	—	300
Burning Moscow	4,800	12	105	200	185	125	160	135	—
North Potosi	2,000	1	300	27½	—	13	35	36	—
Rogers, F. D.	3,000	1	250	18	—	13	12	12	—
Meredith	7,200	12	300	80	35	36	42½	42½	46
Charles Caney	1,800	1	30	67	—	60	55	—	—
Sacramento	1,800	1	600	60	—	60	60	60	60
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	1250	1150	1250	—	1250	—
Iowa	—	—	—	115	121	90	—	95	—
El Dorado	—	—	—	—	42	43	67	70	47
Norlon	1,600	1	—	26	27	27	28	28½	26
La Grange	—	—	—	—	—	8	6	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	20	—	—	—	—
Burnside	—	—	—	61	62	60	47	47	42½
Adriatic	—	—	—	16	9	9	9	9½	8
Cedar Hill Tunnel	—	—	—	7½	7	7	6	6½	7½
Mount Davidson	10,000	3	200	7	7	6½	7½	6½	6
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	4	50	390	380	—	—	375	375
Antelope	1,200	1	500	385	—	375	375	375	345
Esmeralda	1,900	1	1000	45	45	50	47½	43	46
Real Del Monte	4,400	1	400	75	82½	—	90	—	108
Aetna	1,200	1	100	—	—	—	—	—	—
Utah	—	—	—	95	102½	—	102½	—	97½
Silver Hill	3,000	1	—	40	40	42½	41½	42½	42
Nevada	—	—	—	90	105	105	—	—	—
<b>OSO STOCKS.</b>									
Josephine	—	—	—	31	—	32	36	36	33
Oso	—	—	—	24	29	30	24	30	—
Willow Springs	—	—	—	—	29	28	27	25	20
<b>MEXICAN MINES.</b>									
Mina Prieta	—	—	—	—	—	—	—	—	137
Dios Padre	—	—	—	—	70	70	—	65	—
<b>COPPER STOCKS.</b>									
Napoleon	—	—	—	24	26	25	25	22	20

## STOCK REMARKS.

SAN FRANCISCO, March 16th, 1883.

The Mining Market for the past week has been decidedly dull. Transactions have been comparatively light, first and second class stocks have generally declined. Stocks of lower grade have held firm to last week's quotations, and some have advanced. Many buyers have concluded, before investing further, to visit the mines and examine progress. Some have already gone, others are waiting for improved roads and more settled weather. Capital, for legitimate operations, is as abundant as ever, but there is evidently a growing disposition on the part of buyers, to exercise more caution than heretofore, and to rely more upon personal knowledge and inspection of the mines. We subjoin the transactions of the week.

## TRANSACTIONS IN SHARES, FOR THE WEEK.

## NEVADA TERRITORY.

Ophir—60 at \$2900, b. o. 60 days.  
Gould & Curry—8 at \$2,375.  
Chollar—12 at 660,—40 at 650  
Sierra Nevada—20 at \$87½  
Savage—5 at 1300, b 30 ds.  
Burning Moscow—40 at \$215—20 at 205—50 at 155—  
26 at 152½—20 at 170—52 at 150  
North Potosi—29 at \$36  
Rogers—52½ at \$12—12½ at 13  
Meredith—20 at \$40—134 at 35  
Sacramento—6 at 60  
Savage—5 at \$1175—10 at 1250  
Iowa—5 at \$120—10 at 121  
Norton—10 at \$29—35 at 28—15 at 27—15 at 26½  
Burnside—20 at \$51—10 at 45—30 at 50—22 at 52—5  
52½—10 at 53—10 at 49—22 at 48—10 at 46—10 at 47  
Adriatic—10 at 17—10 at 16—21½ at 15½—10 at 15—  
20 at 8½—20 at 8½—60 at 9½—10 at 9½—57 at 9—10  
at 10—170 at 9  
Madison—100 at 22—3 at 22½  
Lucerne—30 at 10½  
Nevada—10 at \$100—30 at 105—150 at 105 b. o. 60 ds.  
Cedar Hill Tunnel Co.—84 at \$8—40 at 7½ 30 at 7—25  
at 6—100 at 8 b. 30 ds.  
Mount Davidson—10 at \$7—25 at 8  
Oriental—130 at \$6—100 at 6½  
Lady Bryan—273 at \$12—125 at 12½—40 at 13  
Rhodes Diggings—10 at \$52½  
Governor Nye—245 at \$13—70 at 13½  
Cole 15 at \$15  
Hattie—10 at \$10—35 at 12½  
Hazel Green—570 at \$7—133 at 6¼—80 at 6—50 at 5¼  
10 at 5½  
Annie Laurie—20 at \$21½  
Reese River—25 at \$8—100 at 7½—50 at 8—70 at 7¼  
Union, Gold Hill—5 at \$25  
Best & Belcher—10 at \$225—10 at 220

## ESMERALDA STOCKS, ETC.

Wide West—10 at \$390  
Antelope—5 at \$375  
Esmeralda—10 at \$50—10 at 52½  
Real Del Monte—20 at \$82½—5 at 90  
Utah—33 at \$102½—10 at 100  
Bamboo—65 at \$50  
Bodie, No. 2—10 at \$6  
Pond—5 at \$110  
Willow Springs—20 at \$21—10 at 29—100 at 32 b. 60  
ds.—10 at 28  
Josephine—17 at \$34—50 at 31—10 at 32—9 at 33—10  
at 33½—113 at 36—25 at 37½  
Bullion (Russ District)—60 at 40 cts.—470 at 20 cts.  
Dios Padre—2 at \$66  
Napoleon—45 at \$25—40 at 24

## COPPER STOCKS.

## VIRGINIA CITY STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Ask'd		Bid.	Ask'd
Ashland	9	—	Industrious	5	—
Adriatic	19	—	Irving	—	30
Allen	60	—	La Crosse	25	—
Atchison	150	—	Laboring	11	—
American Basin Co.	20	—	McBee	25	—
Belvidere	10	—	Milton	80	100
Battle	20	—	Mary Ann	25	—
Birdsall	22½	—	Monterey Co. (Spring Val)	20	—
Bullion (consolidated)	40	50	Monarch	20	—
Burnside	45	60	Madison	35	40
Burning Moscow	200	—	Mohegan	6	—
Beach & Paxton	115	200	North American	116	—
Baltimore American	25	—	Nevada	—	116
Bald Eagle	2	—	North Ophir	—	20
Bloomington	6	—	Oriental	9	—
Blue Ledge, (Reese River)	25	20	Osceola	10	—
Buchanan	75	100	Pioneer	10	12
Cedar Hill Tunnel	5	—	Pride of Washoe	18	22
Caledonia	5	—	Sierra Nevada	6	—
Comet (Simpson's Park)	60	—	Philadel	40	—
Cole	20	—	Recorder	2	—
Commercial	4	—	Santa Rita	35	—
Consolidated Cedar Hill	4	—	Santa Fe	12½	—
Dargan	5	—	Summit	5	—
Dayton Company	10	—	Sweezy	—	—
Declar	5	—	St. George	4	—
Dann	10	12	Sierra Nevada	70	96
Desert	5	—	Sierra	22½	—
Empire	5	—	Sacramento	70	77
El Dorado	60	—	Sigel	2	—
Eureka	25	—	Texas	8	9
Evo'ng Star, Argenteo Dist	30	—	U. S. Mining Company	5	—
Empire Co. (Spring Val.)	25	—	Union, Gold Hill	40	—
Fairview	17	—	Uncle Sam	—	—
Governor Nye	7	8	Uncle Sam	—	—
Golden Gate	5	—	Utah	40	—
Grass Valley	11	—	Virginia	6	—
Golden Era	10	—	Washington Ledge	6	—
Golden Eagle	10	—	York	4	—
Hazel Green	5½	—	Yolo	10	12
Harrison Co., Geller Ledge	8	—	Yellow Jacket	400	400
Hawkeye	20	—	Zouave	20	—
Hawley (Spring Valley)	20	—			

## HUMBOLDT AND REESE RIVER STOCK.

There is a large quantity of Humboldt stock in the Virginia market, at low rates; but it is dealt in sparingly, and generally at private rates. Reese River seems to be attracting attention at the present time in preference to Humboldt.

## WASHOE STOCK REMARKS.

[COMPILED FROM THE DAILY TERRITORIAL ENTERPRISE.]

## MONDAY EVENING, Mar. 2nd.

The election to-day has interfered somewhat with the stock trade, and few sales are reported. A gentleman just arrived from Peavine exhibits some specimens of the recently discovered quartz in that section. One ledge, upon which a number of locations have been made, crops out at three or four points during a distance of as many miles, and is apparently forty or fifty feet in thickness. The quartz presents nothing to the eye but anthony, but assay shows silver and gold as well. The locality is some forty or forty-five miles north of Virginia. When the informant of the Enterprise left Peavine, about two hundred prospectors had arrived; and something of an excitement was brewing. The people of Dayton are also talking excitedly of a newly found range of three ledges, running near and parallel with each other, about six miles from that place. The croppings are over one hundred feet in height, and assays from them have shown in the neighborhood of \$100 in gold and silver to the ton. There is quite a stampede in that direction, we are informed. There has been a light inquiry to-day for Birdsall, at \$20; for Union, of Gold Hill, at \$25; for Beach and Paxton, at \$65 @ 70; for Oriental, at \$8 @ 9; for Fairview, at 15 @ 17, for Zouave at \$7 @ 18.

## TUESDAY EVENING, March 3d

Transactions to-day have not been numerous or very important. The Reese River mines have been a prominent topic, owing to a large yield from the Blue Ridge, in that section. Eleven hundred pounds of ore produced the astonishing result of \$1,136 in silver. The bar of bullion is on exhibition at Light's Exchange, as well as some specimens of the ore. Some fifty feet of that ledge were offered at \$25 per foot, \$20 was bid. There has been some action in Union, Gold Hill, to-day. Sixty feet sold at \$25, 15 feet at \$27 50, and 12 feet at \$30. Zouave has been in request, to fill orders from below. Forty feet sold at \$18, and 36 feet at \$20. Birdsall has been dealt in at \$20. This stock, owing to the near approach of the shaft now being sunk to the ledge, is getting into request. Bullion can be had at \$37 50 @ 40, in small lots. It is sparingly offered. Milton, although quiet, can be sold at \$75 @ 80, with little in market. Burnside is inactive, at a shade below San Francisco figures. Some very excellent looking ore is being exhibited from the Irving. Fairview can be sold at \$16 @ \$17 @ 18, but none changing hands. Beach & Paxton is still upward, but as the claim is small, it is obtained with difficulty. An immense body of ore of moderate value is exhibited. We quote it at \$75 @ 80, although there is none in market at these figures. Texas and Oriental are firm at \$8 @ 10.

## WEDNESDAY EVENING, March 4th.

Transactions have been limited, with no especial demand for anything. There has been sale for almost everything, however, in the shape of stocks.

Gold Hill shares of all kinds are meeting with favor. Union is in large demand at \$25 @ 30. Eureka, recently incorporated, is saleable at \$20. Buchanan is rating at \$75 @ 100. Bullion remains at our quotations of yesterday, with none offering. Fairview ranges from \$15 @ 17. Yolo can be had for \$10 @ 12. Sinicola may be gotten at \$9 @ 10. Zouave has been lightly inquired for at \$18 @ 20. Sixteen foot sold at \$19. Beach & Paxton can be sold at \$100. Holders are asking \$500. With so wide a gulf between buyers and sellers, we cannot hope to report many transactions in this stock within the next thirty days. Birdsall is saleable at \$20, in small lots. Twenty feet sold at these figures. Oriental is marketable at \$7 @ 8. Sixteen feet sold to-day at \$7, 19 feet at \$8 and 19 feet at \$8 50. Texas is firm at \$8.

## THURSDAY EVENING, March 6th.

The stock trade has been remarkably active to-day, and the trading has been confined to low priced shares, in which there is a growing disposition to invest. The market is abundantly supplied with capital, which is handled hastily and without discretion in some instances; but a return of the frenzy of '60 is not anticipated. The impatience of capital, however, seems to increase with the supply, and during the coming Summer more or less imprudence in investing may reasonably be looked for. There has been a light demand for Zouave at \$19 @ 20, and some 40 shares have been transferred at these figures. This stock is finding its way into the hands of heavy operators at the Ray. The Pioneer, in this district, has been dealt in to some extent to-day, and a number of feet changed hands at \$6 @ 10. We know nothing of its merits. The ledge claimed is immediately west of the Virginia. Birdsall has been marketable to-day at 20. Twenty-five feet changed hands. There are buyers of Union, Gold Hill, at \$27 50 @ \$30. Twenty-five feet were sold at the former figures. Adriatic and Harrison, Flowery District, are in request at low rates; \$3 is offered for the first and \$3 @ 4 for the latter.

## FRIDAY EVENING, March 6th.

The business of the week presents a handsome aggregate of sales, and a general advance of stocks is observable. Moscow has been one of the themes of the day. Yesterday, \$200 and \$225 were paid, and the impression prevailed that the stock would advance to \$500 before the close of the week. This expectation has not been realized. We have heard of no offer above \$200 to-day. The North Ophir prodigy has engrossed some attention. The assays are certainly large, and well calculated to excite; but the extent of the pay streak is a question upon which there is a very decided conflict of opinion. Some who have visited the claim venture to express an emphatically unfavorable opinion of its merits. It has been offered to-day at \$20 per foot, without buyers. The Yellow Jacket has advanced to \$850 @ \$500—attributable almost entirely to favorable developments. Were it free of dispute—the Union also claiming the ledge—it would reach \$1000 per foot in less than 30 days. Bullion, Burnside and Milton are inactive, and we have no transactions in either to report. Birdsall is selling in small lots at \$20 @ 22 50, and 40 feet changed hands to-day at these figures. Texas is saleable at \$7 @ 8. 10 feet sold at \$7 50. Beach and Paxton can be sold readily. 10 feet found a purchaser to-day at \$118 per share. Grass Valley is in demand at \$8 @ 10, and \$12, it is reported, has been paid. This old title is being brought up by the owners of ground which it is supposed to cover. Flowery stocks are on the advance. Adriatic is saleable at \$15 @ 20, and Harrison can be sold at twice its former rates.

Our Saturday's report has not come to hand.

The only changes we notice in Monday's report, of previous quotations, is an advance of El Dorado from \$50 to \$60, and Union, Gold Hill, from \$35 to \$40. Yellow Jacket is still improving—five feet sold on Monday for \$400 per foot.

## ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Asked		Bid	Asked
Amador	—	5	Heath	—	10 15
Atlantic	2	—	Live Yankee	—	15
Arcade	6	10	Lord Byron	—	8
Antelope	—	375	La Plata	—	10
Alturus	15	—	Main Esmeralda	—	55
Aetna	—	10	Monroe	—	85
Brazil	5	10	McKinstry Tunnel Co.	—	5
Rodie Bluff Consolidation	20	—	New Esmeralda Consol.	—	15
Bright Star	15	—	Newton	—	50
Bamboo	125	—	Nevada	—	100
Bullion (Van Horn Dist.)	10	—	Nevada Tan'l Co., 1-45 ab.	650	1000
Climax	—	10	Old Winnemucca	—	5
Chihuahua	—	20	Paul Tunnel Co.	—	2
Cape	—	5	Pacific	—	5 10
Del Monte	—	10	Pond	—	100
Dargan	—	9	Pride of Antelope	—	5
East Essex Ex. Ural	10	—	Peru (two ft. to the share)	8	10
Empire	12	—	Real Del Monte	—	70
Fallstaff	4	4	Strawberry	—	20
Fallstaff, Consolidation	4	5	Silver Hill	—	30 46
Fresno	9	9	St. Louis	—	12
Great Eastern	—	4	Tiger	—	4
General Hooker (Con.)	—	40	Union Tunnel	—	20
General Jackson	13½	14	Utah	—	120 175
Garibaldi	60	—	Union Tunnel	—	20
Golden Harvest	—	6	Ural proper	—	550 600
Golden Cross	12½	—	Ural [extension]	—	10
Golden Age	—	12	Wide World	—	2½
Hawkeye	12	25	X-Eliza and Constantiopolis consolidated	—	400
Howard Tunnel Co.	—	3			1½

## TRANSACTIONS OF THE WEEK.

Of the sales during the week, the following only, were submitted for publication:

- 150 feet Bodie Bluff Consolidation, on private terms.
- 5 feet Bodie Silver Hill Consolidation, terms private.
- 25 shares Gen. Hooker Consolidation for \$260

## OBITUARY.

We regret to announce the death of JAMES F. CHENERY, son of RICHARD CHENERY Esq. of this city, who died, on the 6th inst., at the residence of his Grandfather, Dr. Peck, at Northampton, Mass., aged 19, of a fever contracted in the Chickahominy swamps.

We knew him well. He was always generous, brave and kind. A great favorite among his fellows, no party or game of ball was complete without JIMMY.



[CONTINUED FROM 2nd PAGE.]

contained in the torta. This mercury is introduced in a very fine shower, by being pressed through a linen sheet so as to divide the particles as much as possible. The torta, when the mercury is added, should not be too wet, otherwise the mercury would be apt to collect into large globules again—neither should it be too dry, as the mercury in that case would become too much divided, and thus cause a larger loss than necessary in washing;—it should be of such a consistency, that the animals can, in treading, go through it with comparative ease, and yet leave the marks of their feet when removed. Immediately after the addition of the mercury the whole is again trodden for about four or five hours for the purpose of incorporating as perfectly as possible the whole mass.

When pure crystallized sulphate of copper is employed, instead of common calcined pyrites, there is added from 10 to 14 lbs. for each monoton of ore in the torta.

When the magistral and mercury have been added, and a repaso given, the torta may be said to be in working order; and it only remains for the *azoguero* or amalgamator to watch attentively its daily progress by repeatedly taking out *tentaduras*, samples:—the colour and general appearance of the mercury being the only guide to the whole operation.

A short time after the incorporo, the *azoguero* takes out a *tentadura* from the torta; washes away the earthy particles, and carefully examines what remains, which is composed of *polvillos*—metallic sulphides—and mercury. If the latter be rubbed with the thumb, or pressed through a piece of leather, but very little amalgam will remain. The colour of the mercury, in this case, is only taken notice of; and if it has altered a little from its natural colour, with a slight tinge of yellow, it is sign that sufficient magistral has not been added; or if the mercury be divided into small particles it is a similar sign. If it partakes of a lead or deep grey colour, it is evident that an excess of magistral has been added, and the torta, in such a state, is said to be *caliente*—hot—which is very prejudicial, and causes an unnecessary loss of mercury. For this reason it is always better to err in adding too little than too much magistral. If the right quantity required be put upon it at first, it is a great object gained, as the torta at once falls into good working order and goes on, barring unforeseen accidents, with but little trouble to the end of the operation. When a torta is in good working order, the surface of the mercury is of a distinct light grey colour.

[TO BE CONTINUED.]

**THE RULING PASSION.**—The local of the *Amador Ledger*, who has become very much excited with regard to the recent wonderful copper developments in that neighborhood, undertook to describe one of the beautiful mornings of the past week, and let himself off as follows:—

"On Thursday morning last the sun 'cropped out' beautifully, giving 'good indications' of a fine day", etc.

#### A STOCK BOARD IN VIRGINIA CITY.

The brokers of Virginia City have organized a Stock Board, adopted a constitution and code of by-laws and elected the following officers for the first term:—

A. C. WIGHTMAN,.....President,  
JACKSON MCKINSTRY,.....Vice "  
JOHN MCCARTHY,.....Secretary,  
W. R. SCHRIBNER,.....Treasurer.

Their first meeting for business was held on Monday last. Regular daily meetings will be held and publication of the doings thereof made through the newspapers.

**ANOTHER OPHIR.**—The denizens of Virginia City have recently been terribly excited about a wonderfully rich discovery in the "North Oylir," (Argentine District) a lead located and being worked on the Ophir grade, about a mile and a half from the Summit House. It is described as being 50 feet wide and of great richness. It has been opened about 30 feet below the surface—mostly gold, some silver. The *Enterprise* says that one and a-half feet of Savage have been given for ten feet of the new Ophia—equal to about \$20 per foot; 1600 feet in the claim.

**MINING DIRECTORY.**—We have in course of preparation a "Mining Directory," wherein will appear, in tabular form, all the Incorporated Mining Companies, which have offices in this city, the names of their Secretaries, place of office, location of mine, etc., etc. This table will be corrected monthly, and will prove of great convenience to the public. We had intended to have had it ready for this issue, but it is unavoidably postponed until next week.

### Dr. Van Zandt, Consulting Physician and Surgeon

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity Made Subservient for the Cure of all Nervous and Spinal Diseases

**THAT THIS PRINCIPLE**, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanting by physicians, to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

#### Too Much Cannot Be Said

In its praise, for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

#### Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

#### No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRICAL excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

#### To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct views of the origin of all their maladies. Ladies can consult with entire confidence, as he is no speculator upon human life—but is providing himself the only member of the legitimate profession in California who is really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately attuned nervous organism, together with their great sympathetic life, renders him doubly able to assuage those silent complainings which they bear so patiently and so long. No social disquietude need longer afflict our home circles; for he can arouse the stricken energies; restore the wonted tonicity of the body; awaken the melancholic and desponding; and rest those drains which cause so much anxiety; cure those protean maladies which have so long

#### Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength, extreme debility and lifelessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exciting the Electro-Galvanic current, together with his remedial measures which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore you to usefulness, and spare you a blessing to your family and to society.

#### All the World Over

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is as necessary to restore the ELECTRO-GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and certified by hundreds of patients; so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unassailable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, mental and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or cachectic habit of body,

#### None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—depression of spirits which weigh you down—wakefulness that knows no sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you a radical removal of all bodily and mental infirmities, within the scope of science and man to remove.

#### The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made these afflictions an especial study, and that he is the only Surgeon in our State, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataract, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

Nov 29—3m

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T. my23

PALMER, HANSCOM & CO. Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market. my23

ORO HOTEL, Fire-Proof Brick Building, No. 49 K street, Bet. Second and Third, Sacramento City. Jas. Smith, Prop'r. my30

A. S. ROSENBAUM & CO.—Importers of pure Havana Cigars, Tobacco etc., corner Clay and Battery, 25 and 27 Cedar street, New York.

## Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - - Proprietors.

#### Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOGRAPHY and ELECTROGRAPHY, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

### To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so for meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

#### SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will accept the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.



## LOWER CALIFORNIA Colonization and Mining Company.

**THE AGENTS SENT TO MEXICO BY**  
the above Company having returned per steamer  
Oregon, after having secured a tract of upwards of

**125,000 Acres  
OF RICH AGRICULTURAL LAND,  
and a valuable silver Mine,**

The Company is now prepared to furnish exact information to Colonists who have already engaged, or those about to engage in this

### SPLENDID ENTERPRISE.

It proposes to send a vessel about the first of March next, and there being but a limited number of shares

**NO TIME SHOULD BE LOST BY COLONISTS.**

**Farmers Miners and Mechanics,**

With families are particularly invited by the authorities of the Territory. The land selected, in point of fertility of soil, is not excelled on the Continent. The climate is unsurpassed in the world. The richest silver mines known to exist in the Territory are in the immediate vicinity and bordering on the agricultural lands of the Colony.

N. B. Bear in mind that a share costs, at present, only \$200, which entitles the holder to free transportation for self, family, and articles of personal use and an equal share in the land, the Company's Silver Mine, etc. the whole enterprise, being for the mutual benefit of members only.

Full information can be had, and Mineral and Cotton Specimens seen, by applying at the Office of the Company, North-west corner of Clay and Front Street.

### BOARD OF TRUSTEES.

A. G. RANDALL, President.  
Capt. JOHN H. BELL, V. President.  
O. F. GEHRICKE, Secretary.

Trustees.—L. F. LOVELAND, ISAAC FAVOR, M. D. MATHESON, H. C. PATRICK, I. ROWELL, M. D.  
Committee on Survey.—E. RICHARDS, Special Agent;  
Capt. R. C. ANDREWS, Surveyor.

## LEANDER RANSOM, Civil Engineer AND SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

### STATE LOCATING AGENT.

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL  
LANDS,**

**At the low price of \$1.25 per Acre.**

Terms.—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

## HAYNES & LAWTON, IMPORTERS AND DEALERS IN

**CROCKERY,  
GLASS WARE,**

**FRENCH CHINA,**

**Coal Oil Lamps, Table Cutlery,**

**CLOCKS,**

**Silver Plated and Britannia Ware,**

**ETC., ETC., ETC.**

**NO. 516 SANSOME STREET,**

[CORNER OF MERCHANT.]

no16

SAN FRANCISCO.

## Attention! Attention!

**TRACT OF LAND, EMBRACING AN AREA OF 400**  
Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mount Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the center of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency. The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

**HARVEY S. BROWN,**  
No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office. no 13 6mo

## A. ROMAN & Co.,

WHOLESALE AND RETAIL

### Book Establishment, 417 and 419 Montgomery street, SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Piggott on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Philip Overman. Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake. Ore's Dictionary of Arts, Manufactures and Mines.

Weissbach's Mechanics of Machinery and Engineering. Nevill's Hydraulic Formula Tables. Presenius' Chemical Analysis.

**Together with many other works in this and similar lines**

Books imported to order on short notice.

**A. ROMAN & Co.**

**417 & 419 Montgomery Street.**

### READ THIS!

**COAL OIL EXPLOSION.**—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences. [Evening Bulletin, Aug. 4.]

### THEN THIS!

#### Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

#### Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

**BEST FAMILY OIL IN THE MARKET.**

**STANFORD BROTHERS,**

Nos. 121, 123 and 125 California street.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

### Gird's Budding Knife.

**THE ATTENTION OF FARMERS, HORTICULTURISTS**  
and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patents,) San Francisco  
sept-3m

## The Occidental Hotel

IS NOW

**Open for the Reception of Guests.**

**THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS,** and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious **READING AND EXCHANGEROOMS,** have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**  
AND A LARGE  
**CABINET FOR MINERALS;**

ALSO  
**A Branch Telegraph Office,**  
Connecting with all the lines throughout the country.  
**LEWIS LELAND & CO.,**  
Proprietors.  
San Francisco, Jan. 1st, 1863.

## MUSIC! MUSIC!! MUSIC!!!

**A. KOHLER,**

IMPORTER OF EVERY DESCRIPTION OF  
Musical Instruments & Musical Merchandise  
**SHEET MUSIC & MUSICAL BOOKS.**  
**GENUINE ROMAN STRINGS, &c.,**

Light's New Patent Insulated Iron Frame  
is put into all of

**LIGHTS & BRADBURY'S OVERSTRUNG PIANOS.**

Wherever these instruments are known they

**RANK AS THE FIRST AND BEST**

instrument, delicacy of touch and durability.

*All the leading Musicians of the country have testified to their superiority.*

**A. KOHLER, Agent for the Pacific Coast.**

**MELODEONS AND HARMONIUMS,**

FROM THE CELEBRATED MANUFACTORY OF  
**MASON & HAMLIN,**

Warranted superior to all others.

Send for a catalogue and Price list.

oct7 **A. KOHLER, Agent.**

## To Mill Owners.

**WANTED,** by a person fully competent to the position, a situation as **MINING SUPERINTENDENT** in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assorter of Copper Ore. He can give ample testimonies as to his capacity for the position he seeks.

Apply at this Office.

## W. T. & J. GARRATT,

**City Brass and Bell Founders**

**Cor. First & Market sts., San Francisco.**

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE**  
and Lift Pumps, Church and Steamboat Bells, Tavern and Fund Bells and Grings, Hoes and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, **HYDRAULIC PIPES and NOZZLES for MINING PURPOSES,** Iron steam pipe furnished with fittings, &c.; **COUPLING JOINTS of ALL SIZES.** Manufacturers of "Gar ratt's Patent Improved Journal Metal."

## SQUARZA'S PUNCH.

**FIRST PREMIUM**

**AT THE SACRAMENTO AGRICULTURAL STATE FAIR**

FOR 1862.

**ALSO; FIRST PREMIUM**

**At the San Francisco Bay District Agricultural Fair, 1862**

**MANUFACTORY, WHOLESALE AND RETAIL,**

**No. 44 Leidsdorff street,**

Opposite the What Cheer House, San Francisco.

## LATEST IMPROVEMENT in Ladies' Buckles.

**MR. REICHEL RESPECTFULLY ANNOUNCES TO THE** Ladies of this State, as well as to Jewelers and Dealers in Jewelry, that he has made important improvements in **BUCKLES,** which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address **FREDERIK REICHEL,**

Manufacturing Jeweler,  
620 Merchant street, San Francisco.

## GREAT REDUCTION IN PRICES.

**STANFORD BROTHERS,**

**121, 123 and 125 California Street,**

*Keep the Largest Stock of all Kinds of*

## Lamp Stock

*And will Sell Cheaper than any other House in this State*

**LAMPS, CHIMNEYS,**

**WICKS, CAMPHENE,**

**BURNING FLUID,**

**ALCOHOL, COAL OIL,**

**TURPENTINE, KEROSENE OIL,**

**COMET ILLUMINATING OIL,**

**SPEARM OIL, LARD OIL,**

**MACHINERY OIL,**

**RAPSE SEED OIL,**

**CHINA NUT OIL,**

**POLAR OIL,**

**LINSEED OIL, Raw and Boiled,**

**SHARK'S OIL,**

**NEAT'S FOOT OIL,**

**TANNERS OIL, ETC.**

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. apl16t

## 50 lbs. MARINE AND Fire-Proof Paint,

**MANUFACTURED BY THE PACIFIC METALLURGICAL** Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

### 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

### DIRECTIONS:

**HOUSE:**—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

**ROOF:**—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. Fouque, Superintendent.

**WORKS, North Beach; Office, 318 California st., San Francisco.**

## WRIGHT'S PICKS.

**JOHN WRIGHT,** of Sacramento, has established himself in San Francisco for the manufacture of every description of **PICKS,** of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. **JOHN WRIGHT, 511 Market street,** Opposite Battery, San Francisco.

## REMOVAL.

**OFFICE OF THE PACIFIC METALLURGICAL** Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

**COPPER ORES**—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
318 California street, near Sansome, up stairs.



## SPECIAL NOTICES.

**OFFICE OF OPHIR SILVER MINING CO.,** San Francisco, March 10th 1863.—The regular quarterly Meeting of the stockholders of this Company will be held on Wednesday, the 18th inst. at  
mar16 THOS. J. LAMB, Secretary.

**Office of the San Francisco Gold and Silver Mining Company,** San Francisco, March 16, 1863. The Annual Meeting of the above named Company will be held at the Company's Office, No. 7 Montgomery Block, on Monday, April 6, at 1 o'clock, P. M.  
Mar. 16-td J. H. BLOOD, Secretary.

**Office of the Tennessee Gold and Silver Mining Company,** San Francisco, March 16, 1863.—The Annual Meeting of the Stockholders of the above named Company will be held at the company's Office, No. 7, Montgomery Block, on Monday, April 6, 1863.  
mar16-td J. H. BLOOD, Secretary.

## Volcanic Smelting Furnace.

PERSONS DESIRING INFORMATION AS TO THE USE and economical properties of this Furnace, and intending to make use of the same, when satisfied of its superiority over all other means of reducing ores and separating metals from the sulphurets, can obtain all needed explanation and advice in regard to the same, and the terms of sale of rights to use the same, on application Col. J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietress through the Post Office of San Francisco. Drawings may be seen at the office of Col. J. D. Stevenson, No. 614 Merchant street, or at the office of T. Ogg Shaw, in Brannan's Building, Montgomery street. The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes. The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form. The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of a capacity for smelting one ton of ore or more, on signing an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention for a longer period than two months.  
mch 16 MRS. E. J. HALL, M. D., Proprietress.

**WANTED** by an Intelligent and active young man a Situation by which he may obtain an honest livelihood. He is about 16 years of age, and is a good penman. Enquire at this office. \*

## New Style of Lady's Buckle.

W. BOHM, INVENTOR & PATENTEE

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It excels all other buckles in

## Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of

BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH, BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento.

Every Buckle sold will be guaranteed as to its Strength and Durability. W. BOHM, Patentee.

## THEODOR KALLENBERG

Maker of Models  
FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.: Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.  
No. 4 Sansone street, corner Market, au7.3m San Francisco.

## WASHOE

## Stock Exchange,

N. E. cor. Montgomery & Merchant sts.  
SAN FRANCISCO.

## L. W. NEWELL &amp; CO.,

Buy and sell Washoe, Esmeralda and other Mining Stocks and Securities.

## FULTON FOUNDRY &amp; IRON WORKS

## HINCKLEY &amp; CO.,

MANUFACTURERS OF

## Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,  
FIRST STREET,  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*. All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

## TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

## THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will Save in Transportation Material and Labor, from 25 to 50 per cent. of the entire cost of the Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address  
J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan19-1f

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

## REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\*. These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
no16-1f ZENAS WHEELER.

## JULIUS SILVERSMITH,

## Commissioner for Nevada Territory,

## OFFICE, IN LATE STATE CAPITOL,

Corner of Battery & Washington streets.,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of February, 1863.

March 21st, - - - Steamer Constitution.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

Je4 Corner of Sacramento and Leidesdorff sts.

## Miners' Foundry

—AND—

## MACHINE WORKS,

First St., between Howard & Folsom,  
SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

STEAM ENGINES AND BOILERS, FLOUR, SAW AND QUARTZ MILL MACHINERY, MINING PUMPS, AMALGAMATORS, RETORTS, ETC., ETC.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\*. Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING.

San Francisco, February 23, 1863.

## DONAHUE'S

## Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.  
PETER DONAHUE

## Holiday Presents!

IN

WATCHES,  
DIAMONDS,  
JEWELRY AND  
SILVER WARE,

AT

## BRAVERMAN &amp; LEVY'S,

621 Washington Street,

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of

## JEWELRY AND SILVER WARE,

Of the latest and Most Fashionable styles, which we have received by the last Steamer. Also,

## FRENCH CLOCKS,

AND

## PRECIOUS STONES,

Which we are selling, SET or UNSET, at the very LOWEST PRICES.

BRAVERMAN & LEVY,

No. 621 Washington Street,

Facing Maguire's Opera House

Dec 29 1m

## SQUARZA'S PUNCH.

## HOME MANUFACTORY.

WHOLESALE AND RETAIL,

No. 44 Leidesdorff st., near Sacramento.  
Branch at 406 Montgomery street. my30

## PALMER, HANSCOM &amp; CO.,

## GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

## To Quartz Miners.

Knorr's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOMB & CO.,

GOLDEN STATE IRON WORKS,

Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

## VULCAN IRON WORKS CO.

P. TORQUET.....MANAGER.

R. IVERS. C. R. STEIGER. S. AITKEN.

## Steam Engine Builders,

Boiler Makers, Iron Founders and General Engineers,

Nos. 137 & 139 FIRST STREET, - - - - - SAN FRANCISCO.

STEAMBOAT MACHINERY built and repaired; also Saw Flour and Quartz Mills, Pumping and Mining Machinery, etc., etc., etc., etc., etc.

Proprietors of Morse's Patent Fire Grates, JOFVAL, FOURNEYON and other Turbine Water Wheels, with latest improvements.

## DEETKEN'S

## Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 20 to 50 per cent higher than the BEST AMALGAMATING PROCESS.  
Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for its purpose.  
nov8-3m

## LEWIS COFFEY AND RISDON,

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets, Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON.

## JAMES PHELAN,

(LATE J. & M. PHELAN.)

## IMPORTER AND JOBBER,

## Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited  
TERMS LIBERAL. Jan. 1-1f

## For Sale Cheap!

A HORIZONTAL STEAM ENGINE OF 4-Horse Power, Flue Boiler, in excellent order capable of driving a ten stamp mill, for sale at half its original cost. Apply to

JULIUS SILVERSMITH,

Federal Building, cor. Battery and Washington Sts

Room, No. 23.



Whilst thankful for the former confidence bestowed upon me, I desire to say that I am ready to make and repair with cheapness and dispatch everything in my line of business; especially all kinds of apparatus used in Breweries and Distilleries; also, all such as are used where steam, spirits, or pumps of any kind be required. Also, Kitchen utensils for Hotels, Restaurants and private houses. Baking apparatus for Bakers and confectioners, as well as all other kinds of copper work.

All orders from the country promptly attended to.



[FROM THE LONDON "MINING AND SMELTING MAGAZINE."]  
THE MEXICAN METHOD OF AMALGAMATION.

BY JAMES NAPIER, JUN., F. C. S.  
Late Chemist and Assayer to the Guanajuato Mint, Mexico.

[CONTINUED.]

The day after the *incorporo* (should the magistral have been added in proper proportion,) a very different appearance is presented in the *tentadura*. There is found collected mercury which when pressed by the thumb yields amalgam of silver; and what is in the first trial *desecho*—broken up mercury—appears now as what is termed *limadura de plata*, of a whitish colour, and in the form of thin plates or leaves which, if rubbed with the thumb, will be found to consist of dry silver amalgam called *pasilla*. It is from the appearance of this that it is known when the operation is going on well. If *pasilla* be formed in a very short time after the ingredients have been added, it is certain they have been added in proper proportions.

To make a *tentadura*, about 1 lb. of the lama taken from various parts of the *torta*, is put into a *jicara* and slowly washed in water contained in a convenient vessel. The *jicara* is gently moved about in a peculiar manner so that the lighter part only is washed away, leaving in the *jicara* the *limadura de plata*, (small leaves of amalgam); the mercury with its *lista*, or tail; and a portion of the *polvillos*, or heavier metallic sulphides of iron, &c. There is now added to the *jicara* about a tea-cup full of clean water; when it is inclined to one side in the hand, and a gentle but peculiar movement given to the water so as to arrange the contents of the *jicara* in the following order:—The *limadura* or broken up *lis* of mercury should occupy the first or upper part; the metallic portion of the ore should be below this; and, last of all, the mercury and amalgam as a large globule. As I have stated before, the *limadura* is the most important part, and is inspected first; this is done by holding the *jicara* in the right hand in an inclined position, and rubbing the *limadura* with the thumb of the left hand, at the same time observing with great care its colour—the facility with which it can be converted into amalgam by the friction—and of the consistency of the resulting amalgam, that is to say, whether it contains a large or a small amount of mercury. The metallic portion, or *polvillos*, is not of much importance, as the state of the amalgamation cannot be judged of from it. The globule of mercury at the bottom is lastly examined as to the colour, and the quantity of amalgam which it contains is ascertained by pressing it with the thumb on the side of the *jicara*.

These *tentaduras* are commonly taken from the surface and interior of the *torta*. The surface is always the most forward from its being most exposed to the action of the air and sun. Three *tentaduras*, or trials, are made of each *torta* daily; one in the morning before commencing to tread; one after it has been trodden for some time; and a third after the treading is finished.

When the operation approaches conclusion, that is to say, when nearly the whole of the silver capable of being taken up has been extracted, the *limadura* becomes *weak*, and upon being rubbed with the thumb shows but little amalgam. When it ceases to do so altogether, feels soft, and combines into small globules which run down to the bottom of the *jicara*, the amalgamation may be considered finished or *rendido*. However, in some cases, a *torta* may show the signs in this respect of being finished, when in reality it is not; for this reason, the *asciento*, (metallic portion, or *polvillos*, remaining in the bottom of the *jicara*), is also examined by extending it out over the *jicara*, and rubbing the small prills collected there with the finger. If these unite into running mercury, then there is no doubt about the operation being finished; but should they form dry amalgam, it is not so, and the operation must be continued until such is the case.

If the *beneficio* (amalgamation) be low or cold, these signs are deceptive; consequently it is better to carry the *torta* rather hot than cold. At the present day the amalgamators, besides being guided by the above signs, also make an assay of the *torta*, by taking as average a sample as possible from the heap—washing it and collecting the whole of the mercury and amalgam, and having it assayed. By this means it can be easily calculated how much silver the whole of the mercury present ought to contain.

*Treading; and turning over the Torta.*—The operation

of treading is carried on almost exclusively by mules or horses; and it is repeated every other day until the end of the operation. One mule to every two *montones*\* is about the number employed. They are tied together four abreast, and blinded, and a man stands in the centre of the *torta*, holding a halter attached to the animals to guide and direct them through the mass. They first commence to tread at the edge or border of the *torta*, and very gradually work in to the centre, which ensures the whole mass being thoroughly trodden. The operation lasts from about 6 o'clock in the morning till about 1 or 2 in the afternoon. Besides this treading, the *tortas* are also turned over twice a week by men, by means of wooden shovels. This is done on one of the days of the treading, and is commenced immediately on the removal of the animals from the *tortas*.

Animals are kept exclusively for the purpose of treading; and very frequently, when they become old and die, a ball of amalgam, weighing at times many ounces, is found in their stomachs. This is easily accounted for, for when they come from a *torta* they often commence to lick themselves, probably for the salt which may adhere to their bodies, to which also a considerable quantity of very finely divided amalgam may have attached itself. This latter passes into the stomach where, in the course of years, it accumulates into a large piece. These pieces of amalgam are extremely heavy and solid, and vary in size from a small nut to a large egg. The animals, as soon as they have finished treading, are well washed in a large tank of water.

It is believed by many that no means of *repasso* or treading, except that of animals, can be effectual, the reason assigned being that animals have the power of imparting or exciting a slight electrical action in the mass. This, however, has been entirely disproved by some amalgamators using machines in place of animals, and obtaining equally good results. I have no doubt machines will, before long, be entirely used, in stead of animals, for this purpose.

*Washing*—Where the amalgamation is considered complete, some amalgamators, previous to washing the *torta*, add to it a portion of fresh mercury which is called *bano*—bath—for the purpose of collecting as much as possible the finely divided amalgam. However, others prefer using a larger quantity of mercury in the *torta*, from the commencement and adding no *bano*. The next thing to be done is to separate the amalgam from the vast amount of earthy matter with which it is associated, which is done as follows, in most of the well conducted works:—There are arranged in a shed—*lavadero* or washing-house—three large round tanks, built close together in a circle, and communicating with each other by means of an oblong opening about 13 inches high and  $8\frac{1}{2}$  inches wide, commencing at about a foot from the bottom, and terminating at about the same distance, or a little more, from the top. These tanks—*tinajas*—are built of stone-slabs, which have to be carefully cemented together, particularly those at the bottom, as much of the mercury might be lost. In the centre of each tank there is an upright shaft, carrying four cross arms, to which are attached long wooden teeth or stirrers, the whole being moved by one mule. The pinions which move the agitators of the second and third tank are a little larger than that attached to the first, so as to give them rather a slower motion. The tank into which the metallic mud is first thrown is called *la tina cargadora*—(the changing tank)—and the last one the *descargadora* or discharger. The *torta*, before being washed, is divided into a certain number of parts; each part, before being taken to the washing-room, being softened with water and a treading. A given portion—which is measured by large wooden bowls—of the lama is thrown into the first tank (*cargadora*), water being allowed to run in and the machinery being made to revolve rapidly (the driving mule going at a gallop) at the time of changing, so as to break up and separate the whole mass as much as possible. Little by little the mule is made to go gradually slower and slower, till at last it only moves at a gentle walk: the mules being specially trained to the different paces required. From time to time the *azoguero* removes a portion of the slime under treatment, and washes it in a *jicara*:—from the amount of mercury remaining at the bottom—which at last ought to be a mere trace—it is judged when the water holding the earthy particles in suspension may be run off. This is done by opening a large plug near the bottom of the last tank—*descargadora*. When the whole is run off, the plug is again

put in, and the operation continued in a similar manner till the whole *torta* has been washed.

Besides the fluid amalgam which remains at the bottom of the *tina*, there is also a quantity of the heavier portions of the ore—*cabetilla*—which is very rich in amalgam. This is removed in wooden bowls to a tank—*pila apuradora*—and thrown into a large bowl called a *batea apuradora*; these vary from three to five feet in diameter, and float on the surface of the water. The person who manages this *batea* leans over the side of the *pila*, and with a hand on each side of the *batea* manages to give a peculiar shaking or rocking motion, at the same time constantly dipping up a small quantity of water, which he washes round the *batea* and then throws out, carrying with it a portion of the *cabetilla*.

This is repeated till there is collected from 20 to 30 lbs. of *pella*—amalgam—which is carried to the *azoguera* (mercury house,) where it is deposited in a large stone trough. When the whole of the amalgam from a *torta*, or as much as the trough will conveniently hold, has been collected, a large quantity of pure mercury is added, and also a gallon or two of water. Two men next thrust their right arms into the amalgam and stir it about in every possible direction for some time, for the purpose of cleaning it as much as possible. Every now and again the matter which collects on the surface is removed, as is also the water, and the operation repeated time after time until the surface of the amalgam presents a bright smooth surface, when it is very carefully wiped with a woollen cloth.

*Pressing Amalgam or Pella.*—When the amalgam has been properly cleaned as above, it is removed into a cone-shaped *bag-manga*—made of sail-cloth with an outer covering of leather on the sides. This *manga* is hung from a beam, and the excess of mercury filters through the canvas bottom into a trough beneath it. The amalgam is allowed to remain in the bag, as a general rule, about two hours, when it is emptied out on to a table. It now presents the appearance of very fine sand; and in this state is next beaten into iron moulds, and formed into bricks—*bolos*—of about three or four inches thick, and wedged-shaped, so that when six of them are placed together they form a circle, leaving a round hole in the centre for mercurial vapours to pass through in the next operation.

*Burning.*—The final operation is to expel the last traces of mercury from the silver, which is done under a large copper bell. Below the floor of the burning house there is a tank, through which a stream of cold water is constantly flowing. In this a round tripod is placed, on the top of which is laid a round iron plate, with a hole in the centre, about two inches in diameter. On the top of this is placed the *bolos* of silver, as high as the bell will admit, there being a space of about an inch left between the silver and the side of the bell. This is now lowered on to the top of the silver, the joints at the bottom being well secured. There is next put round the bell (leaving a space of about six or eight inches) mud bricks or *adobes*; the intermediate space being filled with charcoal. This is now ignited, and as the heat increases the mercury begins to pass off into a receptacle below. The fire is kept up for about 12 or 15 hours, when the whole is allowed to cool, and the bell removed. The silver is then found to have a beautiful honeycomb appearance, and is called *plati pina*. In this state it is removed in leather bags to the government melting and assay office to be run into bars.

It may be worthy of remark that silver produced by the *patio* amalgamation is purer than that produced by any other method. I have often seen it produced in Guanajuato as fine as that specially prepared in London for check silver.

The duration of the amalgamation process is very various, and depends on many circumstances. About 25 days may be taken as the average time to work a *torta*.

*Loss of Mercury.*—There are two sources of loss of mercury in this operation. One is called the *consumido*, or the portion required to reduce the silver to the metallic state; in practice, weight for weight is allowed, the correct proportion being as 100 is to 108. Every thing lost beyond this is called "*perdida*." It may be taken as a general rule that from 10 to 16 ounces of mercury are sacrificed for each mark (8 ounces) of silver obtained.

[CONTINUED ON 6TH PAGE.]



## SAN FRANCISCO MINING NOTICES.

### ASSESSMENTS LEVIED.

Assessments upon Mining Stocks have been levied as follows:—

Garabaldi.—Assessment of \$1 per share, levied March 2nd.

Sutro.—Assessment of \$1 per share, levied Feb. 23, payable March 23.

Silver Quartz Mill Co.—Assessment of 5 per cent. levied Feb. 23, payable March 28.

Helvetia.—Assessment of 25 cts. per share, levied Feb. 17, payable March 10.

Zouave.—Assessment of \$1 levied Feb. 22, payable March 20.

Rogers.—Assessment of \$5 per share levied Feb. 4, payable March 15.

Sam Wright.—Assessment of 50 cts. per share levied March 2, payable immediately, delinquents to be sold Apr. 2.

Napoleon (copper).—Assessments of \$3 per share levied March 3, payable in 30 days.

Golden Age.—Assessment of one dollar per share levied Feb. 24, payable March 26.

Washoe Gold & Silver.—An assessment of 2 per cent. on capital stock was levied Feb. 16, payable Apr. 1.

Rhodes' Diggings.—Assessment of 25 cts. per share levied Feb. 26, payable March 5.

Texas Co., at a Meeting held Feb. 14, levied an assessment of one dollar per share, payable to the Secretary in Virginia City.

Santa Rosa Co.—February assessment of 20 cents per share now due and payable.

Madison Co.—An assessment, two dollars per share, was levied Feb. 17, payable immediately, at Office, 600 Merchant St.

Union Co.—An assessment of one dollar per share was levied February 16, payable on or before March 25.

Pena Co.—An assessment of \$3 per share was levied Feb. 5, one half payable March 1, balance April 15.

Kossuth Co., Devil's Gate District.—An assessment of 10 cts. per share was levied Feb. 7.

Constitution Company levied an assessment of 25 cts. per Feb. 11, payable immediately.

La Plata Oro Co. levied an assessment of five dollars per share, Feb. 9, payable at Office of the Secretary in Virginia City.

La Plata Co. levied an assessment of 50 cts. per share Feb. 2nd, payable at Office of the President.

Alamo Co. levied an assessment of 50 cts. per share, Feb. 11, payable on or before March 20, at 115 Cal. Street San Francisco, or at office in Carson City.

Tucker Co. levied an assessment of 25 cts. per share, Feb. 11, payable immediately at 608 Merchant St.

Hawley Co. levied an assessment of one dollar per share, on Feb. 9, payable on or before March 12, to Superintendent at the mine, or Secretary at Office.

Slate Range Co. levied an assessment of 50 cts. per share, Feb. 4, payable, March 15.

Moss G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., or to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 75 cents per share, Jan. 27, payable to the Secretary, at 428, Montgomery St.

El Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to the Supt.

Gaudaloupe S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or to the Superintendent at the mine in Aurora, (Esmeralda.)

Dios Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cents per share was levied Jan. 24, payable immediately.

Sonora Mining Co.—An assessment of 25 cents per share was levied Jan. 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount David Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Airatic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norcross.—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skar, at the Mine, on or before Feb. 25.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 31st—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

Hale & Norcross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and C St., Virginia City.

Baltimore America Consolidated.—An assessment of 50 cents per share was levied, Jan. 5.

Savage.—An assessment of \$35 cents per share was levied, Jan. 7.

Hawley.—An assessment of \$1.00 per share was levied Feb. 9, payable March 12.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

### COMPANY MEETINGS.

Chs. Caney Co.—Special meeting of stockholders will be held on Wednesday, March 18, to consider the propriety of an increase of capital stock.

South Utah Co. will hold its annual meeting for election of Trustees, etc., at No. 608 Merchant St., March 20.

Nevada Co. will hold its annual meeting for electing Trustees, etc., at 608 Merchant St., March 20.

Annie Laurie Co. will hold its annual meeting for election of Trustees, etc., March 19.

### ASSESSMENT SALES.

Sales of Stock for non-payment of assessments are advertised to be sold as follows:—

Oriental Tunnel Co. will sell, on Saturday, Mar. 28.

Mars will institute proceedings against delinquents, Mar. 16th.

Planet will institute proceedings against delinquents Mar. 16th.

Meredith.—Annual meeting of stockholders will be held Monday, Mar. 16, at 2 P. M., at 712 Montgomery St.

Texas Co. will sell delinquent shares, on the 14 of March.

Meredith Co. will sell delinquent stock, March 2nd.

Coso Co. will sell delinquent stock, March 18.

Moray Co. (V. City)—Suits for delinquent assessments will be commenced, March 14.

Michigan Co. (Gold Hill) will commence suits for delinquent assessments, March 16.

North Potosi Mining Co.—Sales delinquent stock will be made March 17.

Peytona G. & S. Mining Co.—Sales of delinquent stock will be made March 1st.

Cole Silver Mining Co.—Sales by Jerome Rice & Co., 327, Montgomery St., San Francisco, on the 25th of February.

Combination G. & S. Mining Co.—Sale by E. S. Spear & Co., at 433 California St., on the 10th day of March next.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

Desert Mining Co.—Shares of delinquent stockholder will be sold at auction, for assessments, at No. 400, Montgomery street, Jan. 27.

### GENERAL NOTICES.

Yellow Jacket.—Corporate Deed now ready for signature at office of H. G. Maynard, Gold Hill, N. T.

Jenny Lind (Esmeralda).—Owners of ground in this Cot are requestes to call and sign deed of trust at 608 Merchant St.

Mount Hope Co.—Persons claiming stock are requested to present title papers for examination till March 16.

U. S. Mining Co.—All persons claiming stock are requested to present title papers for examination at Nos. 7 & 8 Government House.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 foot of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

THE SWEETZ Co., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Beach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

## MINING AND SCIENTIFIC PRESS.

**THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.**

**THIRD YEAR! VOLUME VI.—NEW SERIES!**

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects, Millwrights and Farmers!

This Journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.

### Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80

Names can be sent in at different times and from different Post-offices

Specimen copies will be sent gratis to any part of the country.

### EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

C. W. THOMAS, Plaining Mill, California street, facing the Mission R. R. Depot, San Francisco.

TURNER, MARSH & USGOOD, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts.

D. R. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner.



A CHAPTER TO INVENTORS AND DISCOVERERS.

The whole community is benefitted by the promotion of the useful arts, and, therefore, it is for the public good to hold out the promise of rewards to the inventors of new and useful arts and manufactures, who may first put the public in possession of them. It is true that by such a grant as a patent makes—a monopoly for a time—every other person is restrained during the continuance of the monopoly from using the invention, even if he makes a similar discovery himself. But at the time the grant is made, it is by no means certain that the invention will be given to the public, or even made by any other person; and by the temporary suspension of their right, the people acquire the certainty of being able to use the invention at the expiration of the monopoly. Utility to the public is, in fact, the consideration of every grant for the sole use of an invention, and letters-patent containing such grants always state the public good to be the motive in making the grant.

Hence, therefore, the total absence of utility to the public, in any invention, will at all times vitiate a grant of the sole use of it. But it will not be void on that ground if it were useful to the public, although such utility may be very small.

But an invention may be of some use to the public, and yet be so trifling or frivolous, that the inconvenience arising from a grant of the sole use of it would not be adequately compensated by the benefit which the public would receive from it. The law, therefore, has deemed it right that mere discovery of any new manufacture shall not vest the sole right to use it in the inventor; but that to be entitled to such privilege he must obtain a grant from the Government, who have the right of judging, not only whether the invention is likely to be of sufficient utility to warrant its being made a matter of public concern, but also the duration of the privilege it merits.

There is reason to believe, though it is not positively known, that the practice of making grants of the sole use of inventions originated in England, and that it has thence been copied more or less closely by other nations. It is a power derived from the common law of England; and this law has been modified by statute in modern times both in England and other countries. (Hindmarch on Patents, 3.)

No person can be the grantee of a privilege in an invention except the true and first inventor. To be capable of supporting such a grant the patentee must be the person who has not only actually invented or imported the invention, but who has been the first to give it to the public.

In England it is held that the first importer of an invention from abroad may have a patent. (Edgeberry vs. Stephen, 2 Salk., 447; Dav. P. C. 36.) This, however, is not the case in the United States. Here the inventor alone can get a patent. He is deemed the first inventor who first gives, or contracts by patent to give, a knowledge of it to the public. And the fact of first introducing an invention is *prima facie* proof of first invention. Although a patentee's claim to be the first inventor will not be defeated by the prior discovery of the same thing by one who kept it secret, yet it is otherwise if the invention was known to be used by the public at any time before the date of the patent.

If the inventor himself publishes a knowledge of it, the law deems that he thereby dedicates it to the public; and when once the publication has been made the act is irrevocable, and a patent can-

not be granted, or if granted will be useless. And if the public becomes possessed of a knowledge of it by any means whatever, no patent can be granted.

WORKING SILVER ORES.

Our next issue will conclude the valuable treatise on the Mexican Pateo process of working silver ores, which we have been for several weeks republishing from the "London Mining and Smelting Magazine." The concluding portion, which will be given next week, is devoted chiefly to the *philosophy* of the various manipulations, and will be found both valuable and interesting. Although this somewhat lengthy paper may be rather dry and uninteresting to the general reader, it will be found of much value and importance to all who are practically engaged in the difficult and intricate business of extracting silver from its ores. Notwithstanding, as intimated by the author of the treatise, much of the tedious Mexican hand and mule process may now be more advantageously and economically performed by the aid of machinery, still the primitive modes of manipulation employed years ago, by the Mexican miners, may be profitably studied even at the present day. There is little doubt, but that the general principles of the "Patio process," modified and accelerated by modern machinery, will prove the most economical and effectual method of working silver ores, which in the present condition of metallurgical and chemical knowledge, can be devised. We again commend to all interested a careful perusal of the treatise referred to. It will be found of as much value to the prospector, as to the "process man." It will be found almost invaluable to the prospector who would arrive at a practical knowledge of the value and character of his mine. It can be obtained in no other publication in this country, than the SCIENTIFIC PRESS. We have extra files of the Press, from November last, which will be furnished at the regular subscription price, and which contain much reliable matter, other than the treatise upon working silver ores.

THE DIOS PADRE MINING CO.

The mine belonging to the Dios Padre Company is situated in the Alamos District, State of Sonora, Mexico, and adjoins the celebrated mine of Almadre, 75 miles from the port of Santa Barbara. There is a good wagon road from the port to the mine.

This company was organized in November 1862, with a capital stock of \$960,000, divided into 1920 shares of \$500 each. The Company holds 2400 feet in length. The vein is a very heavy one being about 40 feet wide, and has been opened by a shaft to the depth of 220 feet, which is substantially walled from the bottom up. The mine is so situated that it may readily be drained by a tunnel to the depth of about 500 feet. A mill to be driven by a seventy horse power is now in process of construction. Ten stamps will be put up at first, to be subsequently increased to forty. Wheelers' amalgamating pans and separators will be employed. The mill will be ready to start about the first of June next. About \$75,000 have been expended in opening the same and erecting the machinery.

The Company's office is at No. 10, Armory Hall, in this city, and the present officers, are Ira P. Rankin, President; T. A. Talbert, Treasurer; J. F. Nesmith, Secretary, and Ira P. Rankin, E. W. McKinstry, T. A. Talbert, C. H. Bradford, D. Maddux and F. Shackley, Trustees.

STOCK BOARD IN SACRAMENTO. A Board of Stockbrokers has been formed in Sacramento. The meetings will be held daily from 2 to 3 P. M. at Court House Block. The terms of admission for the present are fixed at \$25 initiation fee and \$3 monthly dues.

TRIFLES LIGHT AS AIR.—The winds which come over to us from America have at all times held in their loftiest currents, and carried over to us that remarkable dust which they sweep up from the summit of the Andes, or the arid pampas of South America. The dust has been deposited on the north coast of Africa, on the Pyrenees, and even on the snow clad fields of our Alps; and in it, in our days, a German natural philosopher has discovered atoms of American soil, of Brazilian rocks and thousands of the small light bodies of microscopic animals from the banks of the Orinoco.—*Kohl's Discovery of America.*

MINING STOCKS IN VIRGINIA CITY.

The stock excitement which, within the last two or three weeks has been gradually declining in San Francisco seems to have been transferred to Virginia City. The business of that place for the week ending with Saturday March 14, footed up at about \$250,000. Nearly every class of stocks in that city are advancing, and many who have hitherto kept aloof from mining speculation, have caught the infection, and are converting all their surplus cash into "feet." The recent extraordinary successes of several of the first class mines, and the rapid advance of stocks generally, has been the exciting cause of this sudden activity. There appears to be no limit to the amount of capital, home and foreign, offered for investment. The number of transfers during the week under review were very numerous, and embraces a large variety of companies, some of which are seldom heard from in stock transactions. Gold Hill stocks, of second and third class, seem to have come in for an unusual share of attention. The various lawsuits in pendency appear to have caused some fluctuations in such stocks as were thereby affected, as favorable or unfavorable rumors were set on foot. The legal differences between the Burning Mountain and Madi-on seem to embrace a large share of attention, both there and in this city. Several mammoth "cards" have been put forth by the friends of the contending parties, much to the pecuniary benefit of a leading San Francisco daily. Our compilation of "Remarks" for the week, which will be found in another column, is very full, and affords abundant evidence of a most unusual degree of activity.

NEW AMALGAMATOR.

A new gold and silver amalgamator, containing several new and important principles in its construction, may be seen at work every day, at the Miners' Foundry, on First St. This amalgamator has been patented by Mr. West, a practical Washoe silver ore worker. One of the prominent features in this pan, is the introduction of a copper steam-pipe around the inside circumference, which operates as a most admirable collector of the amalgam, nearly all of which is always found at every "clean up" adhering to this pipe. When the amalgam is once brought in contact with it no action of the machine can again separate it, but it remains permanently fixed, until the pan is cleaned up. Other improvements have also been introduced in the shape and movements of the mullers. We would advise quartz men to call and examine this pan for themselves. The results of the operation of this pan as compared with those now in general use are said to be greatly in its favor. It can be obtained at the Miners' Foundry.

LIST OF MINING COMPANIES.—We give, on the first page of the present issue, a partial list of Incorporated Mining Companies, which have their offices of business in this city. There will undoubtedly be found many inaccuracies in the list, which we shall correct as fast as they may be discovered or whenever they may be handed in to us. Secretaries of Companies, and others interested, will confer a favor by sending to this office a memorandum of any errors or omissions which they may notice. A number of additional companies will appear in the next issue. We shall continue the table from week to week until it is correct and complete.—after which time it will be published monthly and corrected, as changes and additions occur.

THE "OREGON" FOR MEXICAN PORTS.—The steamship Oregon, Captain Wakeman, sailed for Mazatlan and Guaymas Monday. This vessel was completely loaded with machinery and merchandise for those ports, and had to refuse large quantities of freight offered. The machinery on board was ordered by mining companies which were composed almost exclusively of Americans. It is stated by parties in the boiler and machinery business that enough of those manufactures is already ordered to occupy all the room on board the Oregon which may be available for such purposes on her next trip. A large number of passengers went down who profess intending to engage in mining operations.

We are indebted to Hon. A. A. SARGENT for several valuable public documents, and for other favors.



## GENERAL MINING STOCK REPORT.

## REPORT OF SALES

At the San Francisco Mining Stock Board,  
For the week ending March 27, 1883.

Names of Companies.	Total No. Shares.	Shares per ft.	Bar Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2800	—	—	2600	2600	—
Gold & Curry	4,800	4	500	3150	—	—	3100	3250	3100
Central	1,800	12	300	1800	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	6,000	4	500	530	520	—	525	—	—
Potosi	2,800	12	400	240	335	400	500	470	400
Hale & Norcross	80	2	500	750	—	—	750	—	—
Sierra Nevada	3,000	1	300	—	—	65	60	79	85
Idaho	8,000	4	500	280	—	—	—	—	—
Idaho	4,800	2	100	182½	165	120	101	100	175
Burning Moscow	2,400	4	300	—	15	—	—	180	25½
Rogers, F. D.	3,000	1	250	11	13	13	13	14	—
Meredith	7,200	2	125	—	—	—	43	40	42½
Charles Caney	1,800	1	30	57½	55	57½	61	67½	60
Sacramento	1,800	1	500	60	—	—	50	50	—
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	—	—	—	1000	1000	1050	1125	—
Idaho	—	—	—	—	—	—	—	—	—
El Dorado	—	—	—	52	51	57½	70	61	65
Norton	1,000	1	—	25	25	—	23	25	—
La Grasse	—	—	—	—	9	8	—	9	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	40	60	49½	48	57	55
Adriatic	—	—	—	9	8½	7½	9½	7	7½
Cedar Hill Tunnel	—	—	—	8½	6½	7½	7½	7	7½
Mount Davidson	10,000	3	200	5	6	6	6	6½	6
<b>NEVADA STOCKS.</b>									
Wide West	2,600	4	60	380	372½	385	—	—	—
Antelope	1,200	1	500	345	345	350	—	340	—
Esmeralda	1,800	1	1000	45	40	—	35	35	41
Real Del Monte	4,400	1	400	107½	100	100	99	81	95
Atlas	1,200	1	100	—	—	—	—	—	—
Utah	—	—	—	92½	—	—	6	97½	—
Silver Hill	3,000	1	—	50½	55	60	50	50	51
Nevada	—	—	—	—	—	—	—	75	65
<b>COPPER STOCKS.</b>									
Josephine	—	—	—	32	29	26	22	25	25
Coro	—	—	—	—	32½	—	—	—	—
Willow Springs	—	—	—	16	18	17½	15	15	17
<b>MEXICAN MINES.</b>									
Mina Prieta	—	—	—	—	—	—	—	—	—
Dios Padre	—	—	—	65	—	—	—	46	—
<b>COPPER STOCKS.</b>									
Napoleon	—	—	—	23	20	—	22½	22	—

## TRANSACTIONS IN SHARES, FOR THE WEEK.

## NEVADA STOCKS.

Ophir—12 at 2800  
Chollar—8 at \$40—8 at 551—8 at 575—8 at 570—20 at 520, b. o. 30 ds,  
Savage—10 at \$1225, b. o. 30 ds.—15 at 1215 b. o. 30 ds.  
Burning Moscow—6 at \$170  
Sierra Nevada—35 at \$75  
Potosi—4 at \$275—4 at 290—2 at 400—20 at 470—20 at 475, s. 30 days—40 at 500 s. 30 days—15 at 480  
North Potosi—59 at \$30  
Sacramento—15 at \$60—50 at 60  
Adriatic—125 at \$9—20 at 9¼—25 at 8½  
Burnside—30 at \$50—10 at 49½—5 at 53—10 at 52—10 52½—80 at 55—40 at 57—10 at 57½ 10 at 56  
Madison—10 at \$23  
Cedar Hill Tunnel—43 at \$8¼—50 at 8—25 at 7¾  
Lucerne—30 at 15—650 at 14—25 at 14  
Nevad—200 at \$75—5 at 65  
Chs. Caney—30 at \$60—20 at 65  
Lany Bryan—150 at \$9—50 at 8¼—37 at 8—200 at 8 b. 30 ds.—23 at 7½—315 at 6—273 at 7—50 at 7¼—100 at 7½  
Union, Gold Hill—29 at \$25  
Reese River—170 at \$7—100 at \$6 35 at 6¾  
Golden Age—5 at \$15  
Zouave—28 at \$25—10 at 23—40 at 22  
Peytora—30 at \$40—10 at 42—10 at 42½  
Governor Nye—110 at \$11—50 at 11¼—90 at 11¼  
Augusta 50 at \$1¼  
Recorder 2½ at \$15  
Norton—15 at \$25

## ESMERALDA STOCKS, ETC.

Wide West—15 at \$380—10 at 385  
Antelope—10 at \$350—5 at 340  
Real Del Monte—20 at \$107—2 at 105—8 at 109  
Utah—28 at 100—30 at 102½—15 at 97½  
Bamboo—10 at \$40—7 at 40.  
Willow Springs—20 at 17¼, steamer day—133 at 17½  
5 at 05—18 at 19—15 at 19—350 at 17—10 at 17¼—58 at 16

Josephine at \$24—3 at 35—15 at 32—10 at 30—10 at 31—2 at 29—75 at 20—10 at 23—65 at 22—20 at 26½—20 at 26—33 at 25½—25 at 25  
Dios Padre—2 at \$65  
Silver Hill—10 at \$54 b. o. 30 ds.—60 at 50—20 at 52—10 at 52½—5 at 57½—10 at 55—15 at 56  
Great Western—20 at \$4  
Poide of Antelope—25 at \$3¼  
St. Louis—150 at \$2¼

## COPPER STOCKS.

Napoleon—20 at \$24—45 at 25—8 at 23

## VIRGINIA CITY STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Ask'd		Bid	Ask'd
Ashland	8	9	Industrious	5	5
Atlantic	10	—	Irving	—	30
Albion	150	—	La Grasse	9	12
American Basin Co.	20	—	Laboring	11	—
Belvidere	20	—	McBee	25	—
Bullion	20	—	Milton	80	100
Birdsall	30	—	Mary Ann	25	—
Bullion (consolidated)	45	50	Monterey Co. (Spring Val)	20	—
Burnside	50	65	Monarch	20	—
Burning Moscow	175	190	Mollison	25	35
Beach & Paxton	300	250	Mohagan	6	—
Baltimore American	25	—	North American	5	—
Blue Eagle	2	—	Nevada	75	100
Bloomfield	6	—	North Ophir	—	20
Blue Ledge, (Keece Diver)	25	20	Oriental	—	—
Buchanan	100	112	Osceola	40	—
Cedar Hill Tunnel	5	—	Pioneer	10	12
California	10	—	Pride of Washoe	20	22
Comet (Shannon's Park)	60	—	Philadelphian	40	—
Cole	20	—	Recorder	15	—
Commercial	4	—	Santa Rita	35	40
Consolidated Cedar Hill	4	—	Santa Fe	12½	—
Dargan	—	—	Summit	5	—
Dayton Company	10	—	Sweet	—	—
Deatur	5	—	St. George	4	—
Desert	10	12	Sierra Nevada	9	10
Empire	5	—	Sierra	75	95
El Dorado	70	—	Sacramento	22½	—
Eureka	40	—	Sacramento	02	70
Everett Star, Argenteo Dist	30	—	Siguel	2	—
Empire Co. (Spring Val.)	25	—	Texas	8	9
Everview	20	—	U. S. Mining Company	5	—
Governor Nye	7	8	Union, Gold Hill	50	—
Golden Gate	11	12	U. S. Tunnel	—	—
Grass Valley	11	—	Uncle Sam	—	—
Golden Era	10	—	Utah	40	—
Golden Eagle	10	—	Virginia	5	—
Hazel Green	5½	—	Washington Ledge	6	—
Harrison Co., Geller Ledge	10	—	York	4	—
Hawkeye	20	—	Yolo	10	12
Hawley (Spring Valley)	20	—	Yellow Jacket	350	400
			Zouave	20	—

## WASHOE STOCK REMARKS.

[Compiled from the Daily Territorial Enterprise.]

MONDAY EVENING, March 9, 1883.  
There has been considerable life in low priced stocks to-day, and a large number of transfers have been made. Harrison, Geller Ledge (the incorporated portion) has been inquired for at \$8 @ 10, and fifty or sixty feet have been sold. Large lots are in request at these rates. This outlook for activity is doubtless based on an intent to force the Harrison into prominence as a contestant for the Madison-Moscow ledge. The Hazel Green has been dealt in at \$4 @ \$6, with large orders from below; 50 feet sold at \$4 50; 25 feet at \$4 75; and 30 feet at \$5. Birdsall is also in brisk demand at \$20, with little in market; 19 feet sold to-day at \$21. Yellow Jacket is firm at \$350 @ 400; five feet sold at the latter figures. El Dorado is saleable at \$55 @ 60, with an upward tendency. For Union (Gold Hill) \$35 @ 40 is offered, with little disposition on the part of holders to sell. Texas is selling at \$7 @ 7 50; 40 feet sold at \$7. Grass Valley, 25 feet sold at 9 50. Zouave is in high request at \$19 @ 20; 700 or 800 shares are now held in San Francisco.

TUESDAY EVENING, March 10th, 1883.  
There has been considerable animation in mining shares to-day, and a number of heavy transfers are reported. Union, Gold Hill, advanced \$15 during the day and \$50 @ 55 is offered this evening. Probably 151 feet changed hands at from \$48 to \$55. Bullion is in light demand, and 37 feet were sold at \$40 @ 42 50. Hazel Green has sold pretty extensively at \$4 50 @ 5, and is still saleable at these figures, to fill orders from below. Belvidere has been inquired for to-day, 100 feet sold at \$20. Beach & Paxton is advancing steadily. It is saleable at \$175 @ 260 per foot. There has been some inquiry for Burnside at a shade below San Francisco quotations; without sellers.

WEDNESDAY EVENING, March 11th.  
This has been a day of excitements—not one of two, but of a dozen at least. Everything—positively everything—is advancing, and money is freely offered for investment. Gold Hill stocks have been the especial rage, although Virginia has not been neglected. First, let us speak of Gold Hill. The Eureka has been sought for at a healthy advance. In the morning it was sold at \$25, but it reached \$40 by 4 o'clock P. M., at which figures it may be fairly quoted. Not less than 200 feet changed hands. Leon, a claim which yesterday might have been bought at \$4 and 5, is now saleable at \$20, with as many buyers as sellers. The Leon is located in front of Crown Point. The Overman has been in request all day at \$12 @ 15, with abundance of buyers. Not less than 250 feet were sold. The Belcher has also been in lively demand, and is saleable at a decided advance. Little has changed hands, owing to a disposition on the part of owners to hold. A very rich ledge has been struck near and in front of the Sinaloa, and supposed to be a distinct vein. It assays largely, and has created something of an excitement. Twelve feet sold to-day at \$75 per foot. Yellow Jacket is quiet. It is offered in small lots at \$325 @ 350 without takers. We now turn to Virginia. The Meredith suddenly advanced to \$40 to-day, and the tendency is still upward. The ledge in the lower tunnel of the mine has recently been struck, we understand; hence the advance. The Belvidere has been marketable at \$20, with a number of sales at these figures. Birdsall is in brisk demand at 22 50 @ 25; 39 feet sold at 22 50. El Dorado

is saleable at \$67 50 @ 60, with little in market. This stock is on the advance. Zouave is dull at \$20. No transfers in this stock are reported. Osceola is in request at \$10, with sales of 50 feet. Kenosha can be sold at \$10, and sales at a higher rate are reported. A ledge, about two miles west of Virginia, has just been located by the "Breta Company." The locality is new. An assay of the croppings shows \$47 50, principally in silver. The holders are somewhat excited.

## THURSDAY EVENING, March 12th.

There has been considerable less feeling in stocks to-day than yesterday, although the shares dealt in are scarcely less buoyant. The certainty of a conflict with the Belcher has somewhat cooled the ardor of the owners in the newly developed vein in front of the Sinaloa, at Gold Hill, but the price of the ground is still maintained, and none has changed hands to-day in the market. The Belcher and Overman are still in demand—the former at \$25 @ 30, and the latter at \$15, with more buyers than sellers. The Sinaloa and Leon are in request—the latter at \$20. We quote Yellow Jacket at \$325, and Union at \$50. El Dorado and Birdsall have had something of a run to-day. El Dorado is in demand at \$75, with few sellers. Birdsall has advanced during the day to \$35, with abundance of buyers. Meredith may be quoted at \$40. Kenosha has been selling at \$15, and is in demand, owing to favorable indications in the tunnel of the mine. Beach & Paxton is saleable at \$200, with little in market. Burnside is in request at \$50, with no sellers; \$70 to 75 is asked. Hazel Green is dull at \$5, Zouave at \$20, Oriental at \$7 @ 8, Texas at \$7.

## FRIDAY EVENING, March 13th.

Little has been done in stocks to-day, in comparison with the early part of the week. Over excitement, inevitably reacts in prostration. This is a financial as well as a physical fact. Trade is quiet in Gold Hill. The Bay State engrosses attention, and the Overman and Belcher are in demand. Massion is being dealt in at \$10 @ 12, and a sale of twenty-five feet is reported at \$15. The Princess, adjoining the Union, is finding buyers at figures not reported. In Virginia but few sales are reported, and none of these at advanced rates. For Burnside \$50 is offered without accommodation. South Burnside is saleable at \$6 to 7. Birdsall is still maintained at \$35 @ 40 with little in market. A small lot of Beach & Paxton sold to-day at \$300 per share. This is first sale of this stock reported for some weeks. Twenty-five feet of Rogers, Virginia district, sold at \$40. We quote El Dorado at \$70 @ 75; Meredith at \$40; Sacramento at \$60 @ 62 50; Kenosha, \$15; Osceola, \$10; Santa Rita, \$35 to 40; Oriental, \$8; Hazel Green, \$5; Keystone, \$15 @ 20; Pride of Washoe, \$15 @ 20; Zouave, \$19 @ 20; Belvidere, \$20; Fairview, \$15 @ 20; Bullion, \$40 @ 45; Union, \$50; Buchanan, \$100; Yellow Jacket, \$300 @ 325.

## SATURDAY EVENING, March 14, 1883.

The business of the week foots up largely, stocks to the amount of not less than \$250,000 having changed hands since Monday. Burnside is in high request at \$50, with few sellers. South Burnside is saleable at \$6 @ 7. There is something of a demand for Madison at a shade below San Francisco quotations, but the rumor of a compromise is not implicitly credited, and it is dealt in cautiously; thirty-five feet sold at \$28 @ 30. Birdsall is in request at \$37 @ 40. 25 feet sold at these figures. The possibility of a suit with the Dargan has somewhat depressed the Oriental, and it is offered at figures below our last quotations. Bullion is quiet, with an upward tendency. Eighty feet sold yesterday at \$45. Peytona is in demand at \$30 to 35, and Kenosha at about our last quotations. Beach & Paxton is held for a heavy advance. There is considerable action in Gold Hill stocks. Bay State cannot be bought for less than \$100 per foot. Leon is marketable at \$20 @ 25. Dunn is held at \$10 @ 11. Branch Mint is in demand at \$25. Union is quoted at \$50. The following sales are reported by Platt & Low, of Gold Hill: 12 feet Fuller at \$15; 5 feet Eureka at \$30; Hawkeye at \$15 @ 20; 50 feet Overman at \$20; Mussellon, \$3 @ 12.

## ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Asked		Bid	Asked
Amador	5	6	Heath	10	15
Atlantic	2	—	Live Yankee	15	—
Arcade	6	10	Lord Byron	8	—
Antelope	—	375	La Plata	10	12
Alturus	15	—	Mau Esmeralda	55	—
Atlas	8	10	Monroe	85	—
Brazill	5	10	McKinstry Tunnel Co.	3½	—
Rodie Hudd Consolidation	20	—	New Esmeralda Consol.	15	—
Bright Star	15	—	Newell	50	—
Bamboo	—	—	Nevada	100	—
Bullion (Van Horn Dist.)	10	—	Nevada Tunnel Co., 1-48 sh.	650	850
Climax	10	—	Old Winnemucca	5	10
Chihuahua	20	—	Paul Tunnel Co.	2	—
Cape	5	—	Pacific	5	10
Del Monte	19	120	Pod	100	—
Durkin	9	—	Pride of Antelope	5	—
East Esmeralda	10	—	Peru (two ft. to the share)	8	10
Empire	25	—	Real Del Monte	70	—
Fallstaff	4	4	Strawberry	20	—
Fallstaff, Consolidation	4	5	Silver Hill	57	60
Fresno	9	9	St. Louis	5	—
Falls of Clyde	4	—	Tiger	4	—
Great Eastern	1	—	Union Tunnel	20	30
General Hooker (Con.)	20	30	Union Tunnel	110	120
General Jackson	13½	14	Union Tunnel	20	—
Garibaldi	60	—	Ural proper	550	600
Golden Harvest	6	—	Ural [extension]	10	—
Golden Cross	12½	—	William Tell	2½	—
Golden Age	20	—	Wide West	400	—
Hanover	12	25	X-Elixir and Constantinople consolidated	1½	—
Howard Tunnel Co.	3	—			

## TRANSACTIONS OF THE WEEK.

Tunnel Stock's Incorporated.

1-46 interest, Nevada,	bid	—	\$850 00
50 shares Union,	—	—	30 00
50 " Tucker,	—	—	20 00
60 " Johnson,	—	—	20 00

Of sales during the week, the following only were submitted for report, viz:

100 shares Bodie Bluff Consol. No. 1.	\$18 00
1100 " " " " " 1.	17 50
22 " La Plata,	8 00
50 " General Hooker Consol.	18 00



[CONTINUED FROM 2nd PAGE.]

**Loss of Silver.**—The loss of silver in this amalgamation process is considerable and varies much according to the class of ores operated upon, and particularly on the quality of the grinding, on which depends very much the success of the operation. From 10 to 14 per cent. is an average loss on docile ores; much of this, however, is lost in the form of amalgam from being carried away in fine particles by the water used in washing the tortas; but if more perfect washing vats were employed I have no doubt but the loss of silver could be much decreased.

[TO BE CONCLUDED NEXT WEEK.]

\* monton 32 quintals.

## THE ESMERALDA MINES.

We condense the following from the *Esmeralda Star* of March 14th:

The Pond Ledge on Last Chance Hill, far exceeds anything yet struck in the District for richness in the precious metals. The shaft on this lode has reached a depth of 100 feet, and not a dollar of assessments has the company been compelled to levy in the working of it. Some of the rock will yield several thousands of dollars to the ton. The ledge is about nine feet thick and enlarges as it goes down; the rock is decomposed quartz. The lode is 1200 feet in length, and no danger of conflicting with any other lode.

The mount Braley Company have just commenced running their tunnel, and we understand that the work will be continued day and night.

New Esmeralda is being prosecuted with energy. The Company owning it have gone through one ledge about fourteen feet in width, and will probably get through three more in about thirty days, when they will commence drifting and taking out ore for crushing. The Company intend putting up a large mill this spring.

The Montreal Tunnel, which is located a short distance below the Heath quartz lode, has now reached a distance into the hill of one hundred and thirty feet. This tunnel was located as early as December 1861, and will be one of the best paying enterprises in the District, as it is owned by working men who are determined to push the work with vigor.

The Portland ledge, on Martinez Hill, is turning out excellent rock; a shaft has been sunk 46 feet, and the ledge is now five feet wide. We learn also that the Polar Star is turning out splendid rock, but the owners, J. B. Herbert & Co., have been compelled to suspend work, not being able to find workmen to work even at the high rate of \$12 per foot in sinking the shaft.

The Golden Cross lode on Last Chance Hill, is being worked day and night, and the rock is hauled to Gregory's mill for crushing. This ledge is 1200 feet in length, and is one of the best on the hill; the result of the crushing we have not yet learned—the rock is rich and the company owning it say there is no reason why the mill should not prove it to be so.

**MINERS WANTED.**—Three hundred miners at least are wanted at the present time, and there is or will be an increased demand for men. Work has been compelled to be suspended on some of our best lodes, for lack of workmen. The mills are sadly in need of hands. \$4.50 per day is the wages of miners, and four for men to work in the mills. The Last Chance Tunnel, being run into the hill of the same name has reached a distance in the hill of sixty feet, and is being run day and night. The Tunnel is admirably located for prospecting the hill and reaching the many blind lodes known to be running through the hill.

The General Hooker quartz lode, situated on Silver Hill, between the Antelope and Utah, is still yielding rich rock.

The upper shaft is now down to the depth of fifteen feet and the ledge about three feet in width. Ten dollars per ton has been offered for all the rock taken out by the company, delivered on the ground. The company, we are informed, are free from debt, and have never yet levied any assessments.

There is a scheme to construct another tunnel under the Alps, the point being settled at the Simplon. The total length of the proposed tunnel will be about 4506 metres.

**MINING DIRECTORY.**—We have in course of preparation a "Mining Directory," wherein will appear, in tabular form, all the Incorporated Mining Companies, which have offices in this city, the names of their Secretaries, place of office, location of mine, etc., etc. This table will be corrected monthly, and will prove of great convenience to the public. We had intended to have had it ready for this issue, but it is unavoidably postponed until next week.

## Dr. Van Zandt, Consulting Physician and Surgeon

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity Made Subservient for the Cure of all Nervous and Spinal Diseases

**THAT THIS PRINCIPLE**, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanted by physicians to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

### Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equilibrium of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

### Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

### No Compromise with Disease.

Give the body strength, and nature will relieve herself. Purify the life blood, render the stomach, liver, heart, kidney and all the natural functions active by ELECTRICAL excitation, and at once the aged, the palsied, the nervous, the dispirited, the melancholic, the dyspeptic and the invalid revive under its benign influence.

### To the Ladies of California.

Dr. Van Zandt's success with complaints of women, both in family and office practice, is owing to his correct views of the origin of all their maladies. Ladies can consult him with entire confidence, as he is no speculator upon human ills—but is proving himself the only member of the legitimate profession in California who is really successful in removing those ills which are the peculiar province of the sex. His high appreciation of their delicately situated nervous organism, together with their great sympathetic life, renders him doubly able to assuage those silent complainings which they bear so patiently and so long. No social disquietude need longer afflict our home circles; for he can arouse the stricken energies; restore the wonted tonic of the body; awaken the melancholic and desponding; arrest those drains which cause so much anxiety; cure those protean maladies which have so long

### Baffled the Skill of Physicians.

Develop appetite, life and animation, dispel nervous headache, sinking at the stomach, wandering pains, wasting away of strength; extreme debility and listlessness, hectic cough, sleeplessness, unpleasant dreams and that general depression of life's powers, which go to render her life a misery and death a boon. Dr. Van Zandt, with his new method of exciting the Electro-Galvanic current, together with his remedial measures which are adapted to the necessities of California, will assure you of a complete and radical recovery of all bodily and mental infirmities, and will restore you to usefulness, and spare you a blessing to your family and to society.

### All the World Over

wherever disease exists, whether special to the soil and climate or common to all regions—epidemic or casual, acute or chronic, contagious or non-contagious—it is as necessary to restore the ELECTRO-GALVANIC equilibrium, especially in California, as it is to give food to the starving. This statement is based upon a series of facts extending through many years, and certified by hundreds of patients; so that no principle of science, no rule of experience, no result of any well known cause, rests upon more sure and unassailable foundations, than those which underlie the world-wide reputation of Electricity for the cure of all nervous states of the body, faulty digestion, mental and physical debility or prostration, coughs, asthma, wandering pains of a rheumatic, gouty or mercurial character, and all forms of disease, the result of scrofula or catarrhic habit of body.

### None Need Despair of Relief.

If you have ulcers which will not heal—pains that cannot be removed—melancholy which you cannot shake off—loss of power which you cannot regain—depression of spirits which weigh you down—wakefulness that knows no sleeping—business that languishes for want of energy—a void which no society can fill—suspicion which no assurance can allay—Go to Dr. Van Zandt, for his great success, and the safety with which he administers his new method of Electrical excitation, together with his remedies, which are adapted to the requirements of climate and constitution, will assure you a radical removal of all bodily and mental infirmities, within the scope of science and man to remove.

### The Eye and Ear Diseases.

It must not be forgotten by the eye and ear sufferers that Dr. Van Zandt has made these affections an especial study, and that he is the only Surgeon on our State, who has a diploma for that branch of practice. Very many of the eye and ear troubles are purely deranged nervous actions, and are cured by his electro-galvanic battery—as amaurosis, squinting, cataract, floating specks before vision, twitching of the eyelids, nervous deafness, roaring and buzzing noises in the ears, giddiness, etc. All operations successfully done on those delicate organs of sense.

Office—Corner of Washington and Sansome streets.

nov 29—3m

**WILLIAM FELL**, Notary Public for Storey County, N. T. Commissioner of Deeds for California. Virginia City, N. T.

**PALMER, HANSCOM & Co.** Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market. my 23

**ORO HOTEL**, Fire-Proof Brick Building, No. 49 K street, Bet. Second and Third, Sacramento City. Jas. Smith, Prop'r. my 30

**A. S. ROSENBAUM & CO.**—Importers of pure Havana Cigars, Tobaccos etc., corner Clay and Battery, 26 and 27 Cedar street, New York.

## Mining and Scientific Press

The MINING AND SCIENTIFIC PRESS is published at the Esch Building, Room 27, corner of Battery and Washington streets, San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance. C. W. M. SMITH and W. B. EWER, Proprietors.

### Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, at copper, steel, etc. STEREOGRAPHIC and ELECTROTYPING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Mills, Steel Plate or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will in them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best advertising Medium to be found in the country.

### To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at office.

**SUBSCRIBE.**—Are you a miner and not a subscriber to MINING AND SCIENTIFIC PRESS? If so, you are an loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The amount of practical information, important to miners, mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you send a paper to the "Old Folks at Home?" If so, and desire to send important information and valuable read matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so accurate an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and *four dollars, or two dollars* for six months, become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

### SUGGESTIONS ABOUT FOREIGN PATENTS

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in his own country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly of his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engagements should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice among agents located in England to send out circulars soliciting patronage of American inventors. We caution the inventor against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitor in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee fails to purchase for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.



## LOWER CALIFORNIA

Colonization and Mining Company.

THE AGENTS SENT TO MEXICO BY the above Company having returned per steamer after having secured a tract of upwards of

125,000 Acres

RICH AGRICULTURAL LAND, and a valuable silver Mine,

Company is now prepared to furnish exact information to Colonists who have already engaged, or those who wish to engage in this

## SPLENDID ENTERPRISE.

proposes to send a vessel about the first of March, and there being but a limited number of shares.

NO TIME SHOULD BE LOST BY COLONISTS.

Farmers Miners and Mechanics,

and families are particularly invited by the authorities of the Territory. The land selected, in point of fertility, is not excelled on the Continent. The climate is unsurpassed in the world. The richest Silver is known to exist in the Territory are in the immediate vicinity and bordering on the agricultural lands of the Territory.

Be, Bear in mind that a share costs, at present, only \$200, which entitles the holder to free transportation for self, family, and articles of personal use, and an equal share in the land, the Company's Silver Mine, etc. The whole enterprise, being for the mutual benefit of the shareholders only.

All information can be had, and Mineral and Cotton Minerals seen, by applying at the Office of the Company, North-west corner of Clay and Front Street.

## BOARD OF TRUSTEES.

A. G. RANDALL, President.  
CAPT. JOHN H. BELL, V. President.  
O. F. GEHRICKE, Secretary.

Trustees.—L. F. LOVELAND, ISAAC CAROR, M. D. MATTISON, H. C. PATRIDGE, I. ROWELL, M. D.  
Committee on Survey.—E. RICHARDS, Special Agent;  
R. C. ANDREWS, Surveyor.

LEANDER RANSOM,

Civil Engineer

AND

SURVEYOR,

having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

10,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oc7-3m

HAYNES &amp; LAWTON,

IMPORTERS AND DEALERS IN

CROCKERY,

GLASS WARE,

FRENCH CHINA,

Coal Oil Lamps, Table Cutlery,

CLOCKS,

Silver Plated and Britania Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET,

[CORNER OF MERCHANT.]

no16

SAN FRANCISCO.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mount Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency. The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,  
No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office. no 13 6mo

## A. ROMAN &amp; Co.,

WHOLESALE AND RETAIL

## Book Establishment,

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals. Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice. Pigeon on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman. Gold Mining and Assaying; by Phillips.

Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blakely.

Ure's Dictionary of Arts, Manufactures and Mines. Westbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables. Fresenius' Chemical Analysis.

Together with many other works in this and similar lines

Books imported to order on short notice. A

A. ROMAN &amp; Co.

417 &amp; 419 Montgomery Street.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while the brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

Comet Illuminating Oil!  
Manufactured expressly for Stanford Bro.

THIS POPULAR

## Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,  
Nos. 121, 123 and 125 California street.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Stizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

## Gird's Budding Knife.

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentes,) San Francisco

sep1-3m

## The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be considered equal in every respect to the first class houses of the Atlantic cities.

The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

## News Stand,

AND A LARGE

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND &amp; CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

## MUSIC! MUSIC!! MUSIC!!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments &amp; Musical Merchandise

SHEET MUSIC &amp; MUSICAL BOOKS.

GENUINE ROMAN STRINGS, &amp;c.,

Light's New Patent Insulated Iron Frame is put into all of

LIGHTS &amp; BRADBURY'S OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

Intone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

## MELODEONS AND HARMONIUMS,

FROM THE CELEBRATED MANUFACTORY OF

MASON &amp; HAMLIN,

Warranted superior to all others.

Send for a catalogue and Price List.

oc7

A. KOHLER, Agent.

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as MINING SUPERINTENDENT in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assessor of Copper Ore. He can give ample testimonies as to his capacity for the position he seeks.

Apply at this Office.

## W. T. &amp; J. GARRATT,

City Brass and Bell Founders

Cor. First &amp; Market sts., San Francisco.

BABMET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tappan and Hand Bells and Gongs, Hoses and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c., COUPLING JOINTS or ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."

## SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR

FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

## LATEST IMPROVEMENT

in Ladies' Buckles.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERIK REICHEL, Manufacturing Jeweler, 620 Merchant street, San Francisco.

## GREAT REDUCTION

IN PRICES.

STANFORD BROTHERS,

121, 123 and 125 California Street,

Keep the Largest Stock of all Kinds of

## Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. apl6tf

## 50 lbs. MARINE AND

## Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock, containing Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chaudlers and Trademen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being equally Fire Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUER, Superintendent.

WORKS, North Beach; Office, 318 California st., San Francisco.

## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

## REMOVAL.

OFFICE OF THE PACIFIC METALLURGICAL Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmith's sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent, 318 California street, near Sansome, up stairs.



## SPECIAL NOTICES.

**OFFICE OF OPHIR SILVER MINING CO.,** San Francisco, March 10th 1863.—The regular quarterly Meeting of the stockholders of this Company will be held on Wednesday, the 18th instant.  
mar16 THOS. J. LAMB, Secretary.

**Office of the San Francisco Gold and Silver Mining Company,** San Francisco, March 16, 1863. The Annual Meeting of the above named Company will be held at the Company's Office, No. 7 Montgomery Block, on Monday, April 6, at 1 o'clock, P. M.  
Mar. 16-td J. H. BLOOD, Secretary.

**Office of the Tennessee Gold and Silver Mining Company,** San Francisco, March 16, 1863.—The Annual Meeting of the Stockholders of the above named Company will be held at the company's Office, No. 7, Montgomery Block, on Monday, April 6, 1863.  
mar16-td J. H. BLOOD, Secretary.

**MYERS & DAGGETT'S**  
**Mining and Stock Exchange,**  
No. 23½ B Street, Virginia City, N. T.  
*Mining Stocks of All Kinds Bought & Sold.*  
Business connected with Mining Stocks of every description promptly and confidentially attended to.  
\* \* \* Abstracts of Titles Furnished, Etc.

**FREDERICK MANSELL,**  
**MECHANICAL & ARCHITECTURAL**  
**DRAUGHTSMAN,**  
No. 422 California street, corner of Leidesdorf.  
Drawings of Models made for parties for patents at Washington or London.  
mar23 2m

**Volcanic Smelting Furnace.**

PERSONS DESIRING INFORMATION AS TO THE USE of a economical properties of this Furnace, and intending to make use of the same, when satisfied of its superiority over all other means of reducing ores and separating metals from the sulphurets, can obtain all needed explanation and advice in regard to the same, and the terms of sale of rights to use the same, on application Col J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietress through the Post Office of San Francisco. Drawings may be seen at the office of Col. J. D. Stevenson, No. 614 Merchant street, or at the office of T. Ogg Shaw, in Brannan's Building, Montgomery street.  
The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.  
The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a valuable form.  
The attention of all interested in the subject is requested to examine the important results obtained by this process.  
Parties wishing will be allowed to erect a trial Furnace of a capacity for smelting one ton of ore or more, on signing an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention or a longer period than two months.  
mch 16 MRS. E. J. HALL, M. D., Proprietress.

**New Style of Lady's Buckle.**

**W. BOHM, INVENTOR & PATENTEE**  
THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.  
The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It excels all other buckles in  
- Usefulness, Strength and Appearance.  
The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of  
BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.  
Every Buckle sold will be guaranteed as to its Strength and Durability.  
W. BOHM, Patentee.

**THEODOR KALLENBERG**  
**Maker of Models**  
**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.**  
**No. 4 Sansome street, corner Market;**  
u7-3m) San Francisco.

**FULTON FOUNDRY & IRON WORKS****HINCKLEY & CO.,**

MANUFACTURERS OF

**Steam Engines,**

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,  
**FIRST STREET,**  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* \* \* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**TO OWNERS OF WATER-POWER****Beth's Hydraulic Pressure Wheel.**

**THE SIMPLE, COMPACT, STRONG AND**  
effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will Save in Transportation Material and Labor, from 25 to 50 per cent. of the entire cost of the Structure to which it is applied, and proportionally increase its value.  
For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address  
J. M. BETH.  
Miners' Foundry, San Francisco.  
This Wheel is fully GUARANTEED. Jan19-1f

**Agency For Patents.**

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.  
**WETHERED & TIFFANY,**  
Office, 410 Montgomery street.

**CHARLES R. BOND, (Late City and County Assessor.)**  
**REAL ESTATE AGENT,**  
No. 410 Montgomery street, San Francisco.  
**REAL ESTATE PURCHASED AND SOLD, AND LOANS NEGOTIATED.**

**WHEELER'S**  
**Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
nol6-1f ZENAS WHEELER.

**JULIUS SILVERSMITH,**

**Commissioner for Nevada Territory,**  
**OFFICE, IN LATE STATE CAPITOL,**  
Corner of Battery & Washington streets.,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking of testimony, etc.

**P. M. S. CO.**

**PACIFIC MAIL STEAMSHIP COMPANY'S**  
line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the month of February, 1863.

**March 21st, - - - Steamer Constitution.**

Will leave Folsom Street Wharf, with Passengers and Treasure, for PANAMA.

**AT 9 O'CLOCK, A. M., PUNCTUALLY,**

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.  
For Freight or passage, apply to

**A. B. FORBES, Agent.**  
je4 Corner of Sacramento and Leidesdorf sts.

**Miners' Foundry**  
—AND—  
**MACHINE WORKS,**  
First St., between Howard & Folsom,  
SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

STEAM ENGINES AND BOILERS, FLOUR, SAW AND QUARTZ MILL MACHINERY, MINING PUMPS, AMALGAMATORS, RETORTS, ETC., ETC.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* \* \* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.  
**HOWLAND, ANGEL & KING.**  
San Francisco, February 23, 1863.

**DONAHUE'S**  
**Union Iron and Brass Foundry,**  
CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.  
**The First Established in the State.**

**MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices.** Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.  
PETER DONAHUE

**Holiday Presents!**

IN  
WATCHES,  
DIAMONDS,  
JEWELRY AND  
SILVER WARE.

AT  
**BRAVERMAN & LEVY'S,**

**621 Washington Street,**

WE CALL THE ATTENTION OF OUR FRIENDS AND the public in general to our well assorted stock of  
**JEWELRY AND SILVER WARE,**

Of the latest and Most Fashionable styles, which we have received by the last Steamer. ALSO,

**FRENCH CLOCKS,**  
AND  
**PRECIOUS STONES,**

Which we are selling. SET or UNSET, at the very LOWEST PRICES.

**BRAVERMAN & LEVY,**  
No. 621 Washington Street,  
Facing Maguire's Opera House  
Dec 29 1m

**WANTED** by an Intelligent and active young man a Situation by which he may obtain an honest livelihood. He is about 16 years of age, and is a good enman. Enquire at this office.

**PALMER, HANSCOM & CO.,****GOLDEN STATE IRON WORKS,**

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

**To Quartz Miners.**

**Knox's Improved**  
**AMALGAMATING PAN,**  
WITH  
**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be otherwise lost. Made exclusively by  
**PALMER, HANSCOM & CO.,**  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms, for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

**VULCAN IRON WORKS CO.**

**P. TORQUET.....MANAGER.**

R. IVERS. C. R. STEIGER. S. AITKEN.

**Steam Engine Builders,**  
**Boiler Makers, Iron Founders and General Engineers,**  
Nos. 137 & 139 FIRST STREET, - - - - SAN FRANCISCO.

STEAMBOAT MACHINERY built and repaired; also Saw, Flour and Quartz Mills, Pumping and Mining Machinery, etc., etc., etc.

Proprietors of **Morse's Patent Fire Grates,**  
JOEVAL, FOURNEYTON and other Turbine Water Wheels with latest improvements.

**DEETKEN'S**  
**Chemical and Metallurgical Works,**  
On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS.  
Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose.  
nov8-3m

**LEWIS COFFEY AND RISDON,**  
**STEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets, Opposite Oriental Hotel, San Francisco, Cal.  
**LEWIS COFFEY J. N. RISDON.**

**JAMES PHELAN,**  
(LATE J. & M. PHELAN.)  
**IMPORTER AND JOBBER,**  
**Wines, Liquors, Etc., Etc.,**  
Nos. 616 & 618 Front street,  
Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-tf.

**SQUARZA'S PUNCH.**

**HOME MANUFACTORY.**  
WHOLESALE AND RETAIL,  
**No. 44 Leidesdorf st., near Sacramento.**  
Branch at 406 Montgomery street. my30





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, MARCH 30, 1863.

NO. 22.

#### MRS. HALL'S SMELTING FURNACE.

We are led to believe from a brief paragraph in a late number of the *Virginia City Union*, that the experimental furnace which it was recently announced was in course of construction, after Mrs. Hall's patent, has proved a success. We have ever had much confidence in the invention and will not abandon the same until its failure shall be demonstrated by a fair trial on a practical, working scale. The principles combined in the construction of this furnace are evidently correct in a scientific point of view, and most unquestionably comprise many and important improvements over any other furnace ever constructed. The principal feature of the invention is an enlarged and practical application of the blow-pipe of the laboratory to the most extensive reduction works which it may be desirable to construct. Another important principle, and one which we believe to be entirely new, is the application of a cold water apparatus for condensing and precipitating any volatilized metals, which may be thrown upward by the intense heat and draft of the furnace. Those of our readers who are familiar with the discussions which grew out of the supposed loss of gold by volatilization at the Mint in this city, while that institution was under the direction of Col. Harazthy, must be aware that there is liability to much loss from this cause. At that time numerous ingenious expedients were resorted to to condense those fumes, but, apparently with very unsatisfactory results. Mrs. Hall has most unquestionably succeeded, perfectly, in accomplishing the object sought for, in this, by numerous ingenious metallurgists and mechanics at and present, and that to by an arrangement, so simple and cheap, that it is an especial wonder that no one should have thought of it before. A very correct description of the apparatus is given as follows, by a late correspondent of the *Evening Journal* of this city:—

It consists of a receiver, into which passes the flue of the furnace, and in which the flue terminates or is cut off, and then surmounted by a conical cap, like a draft-cap of an ordinary smoke pipe or chimney. From beneath this cap the fumes pass into the receiver, where they come in contact with a heavy shower of cold water from a sieve in the top, resembling the shower sieve over a bath tub. An opening in the centre of the sieve allows the draft to continue from the flue to the outer air. Thus all the fumes are subjected to condensation without any loss of heat in the furnace; indeed, the heat is rather increased by being confined and driven back by the cold water coming in upon the flue. When the water in the receiver reaches a certain height, it is carried off by a waste pipe, placed at a level below the outlet of the flue.

In addition to the series of blow-pipes, by which a large amount of oxygen is forced into the furnace, jets of steam are also, from time to time introduced, which greatly aid in the oxydization of the sulphurets. An important chemical secret, also involved in this invention, is described by the writer in the *Journal*, already quoted, as follows:—

"Carbon and sulphur both combine readily with every known substance; but their affinity with each other is closer than with any others. When placed in contact in proper proportions, if heat be applied, carbon rapidly absorbs and combines with sulphur in fumes, and they pass off together. When the sulphurets of the metals are heated on a charcoal support, the separation and absorption of the sulphur pro-

ceeds much faster than the oxidation of the metals, and consequently their reduction to a fluid state is secured in a period of time proportioned to the intensity and rapidity of the combustion. This is because both carbon and sulphur have a stronger affinity with oxygen than the metals have, and combine more readily with it.

It is plain, therefore, that in an intense heat produced by a strong blast of air upon charcoal, the facility of reduction of metals must be in direct ratio with the desulphurizing of the same by combination of the sulphur with the carbon and oxygen. This, it is claimed, is most thoroughly performed by the series of blow-pipes, jets of steam, and cold water showers, which form a part of the construction of the Volcanic Smelting Furnace.

We understand that an experimental furnace, capable of smelting one ton of ore at a time, is now in process of erection in this city, and will be ready for operation in a few days, so that those of our citizens who may be interested in the success of this promisingly important invention, will soon have an opportunity of seeing it put to a practical test. If it succeeds, it will be of vast utility to the recently developed copper interests of the State, and by its simplicity and economy, render available millions of tons of ore, which can be of little or no value in this state, under any other known system of reduction.

#### OUR MINING LIST.

We continue our Mining List to-day. During the week we have added fifty-four additional companies, making the present number, all told, *two hundred and three* Mining Companies, who have their principal offices of business in this city. Of this number 30 are in California (19 in the Slate Range District); 14 in the northern States of Mexico; 62 in Esmeralda and districts on the Eastern Slope to the south of that point; 84 in the region about Virginia City, and the balance, 13 in number, in the Humboldt region.

There are numerous other companies, incorporated as San Francisco companies, but we have confined our table to those only who have regularly established offices in this city. No doubt we have omitted many, in our search, and we should be happy to add all such to the list as fast as they are handed in. Many errors in our last week's list have been corrected, but doubtless others still exist which we shall correct as fast as they come to our knowledge. We have lists also in preparation for such as have their offices in Virginia City and Esmeralda, which will appear in due time. There are many important facts, statistical and otherwise, connected with these companies, which we shall speak of in future issues of the Press.

The salvors of treasure from the Golden Gate, have recovered between \$600,000 and \$700,000. They offer to compromise with all shippers at 50 per cent. Some houses have already settled at that rate.

MIRRORS OF THE WORLD.—The proprietors of Wolfstenberg's celebrated Panorama will exhibit the same at the Eureka Theatre, in this city, for "this week only," commencing this Evening. This is one of the finest of this class of paintings, which has ever been produced, and is well worth seeing.

#### MINING CORRESPONDENCE.

GRASS VALLEY, MARCH 25, 1863.

FRIEND EWER:—Our town, the scene of so many excitements in quartz, is again all alive with "copper." Every one is wild with the copper fever, prospecting being the order of the day. The cause of it being what certainly seems to be a genuine bona fide *Copper Mine*, on Rouse's Ranch, about two miles below the town. This ledge has been known to exist for some years, but having been tried for gold and failed, it gradually fell into discredit. Sometime during last November or December, Mr. John Armstrong, formerly a well known resident of this place, but who had made San Francisco his residence for some time, visited his old home, and quietly located the ledge as the *Excelsior Sulphuret Mine* and I suppose took specimens of the rock with him below, at any rate, a short time after he left here, Mr. E. Maslin (late District Atty. of this Co.) was seen to doff the Lawyer's stately suit of black, and put on the grey shirt and other toggery of "yr honest miner," and pitch into the "Sulphuret Mine" in decided earnest. It soon leaked out that copper had been discovered, and then the rush began, the country around about was staked off and claimed all over almost even

"Down to Earth's profound  
And up to Heaven."

And I will venture to say that to-day there is not a man in Grass Valley, who has not somewhere about his clothes a piece of rock that he firmly imagines contains copper. I see from the papers that a company has been formed and incorporated in your city, known as the *Nevada Copper Mining Co.*, and it is believed here that men of wealth and influence are connected with it. Certain it is that should this discovery prove what it gives every indication of being—a genuine Mine—it will add to the already abundant mineral wealth of our town, enough to make this "Valley of Grass" the banner town of the interior and, to those who quietly yet energetically have discovered and developed this new phase of our mineral life, will be due the thanks of our community. I will keep you posted—shall probably visit the mine, to-morrow. MINER.

CONCLUDED.—In to-day's issue we conclude the valuable and interesting treatise upon the working of silver ores, by James Napier, Esq. Mr. N., from a long residence as Chemist and Assayer at the Mexican Mint, in one of the the most extensive silver mining localities in that country, has abundantly prepared himself to write understandingly and fully with regard to the method and manner of working silver ores in that country, and the philosophy of the same. These numbers, to persons engaged in working silver ores, must prove most acceptable and valuable, while the general reader, will doubtless be pleased that the series is concluded, and more room afforded, in our columns, for other matters.

COPPER has been found at Queen Charlott's Island, near Victoria. Coal of a very superior quality has also been found within three miles of Port Angeles.



combine with mercury. If, for instance, metallic copper, in the form of precipitate, with a little salt as an exciting agent, be added to an ore containing sulphide of silver, metallic silver and sulphide of copper will be the result. This result will be more or less perfect, according to the conditions under which the experiment is made. If the ingredients be ground in a mortar, the result will be rapid; but if mercury be now put with this, it will form amalgam but very slowly indeed, unless heavy friction be used. On the other hand, native silver, and metallic silver, formed by precipitation from the sulphate by copper, or by many other means, will amalgamate with greater ease; so that the silver in Dr. Uslar's experiments might actually have been reduced to the metallic state, but would not amalgamate in the torta; and such probably was the case. I have repeated these very experiments of Dr. Uslar on a smaller scale; that is to say, I took the usual proportions of salt and sulphate of copper, and mixed with them moderately rich silver ore. After these had remained in contact for about twelve hours—part of the time exposed to a tropical sun—the experiment was divided into two portions; to one was added a small slip of very bright metallic copper, and to the other a piece of polished iron. Almost the moment the copper was added, it became coated with a white precipitate of silver; silver was also precipitated on the iron, but not until it had been in contact for some time. Again, if we take into consideration the small proportion of metallic silver there is in the torta, compared to the enormous amount of earthy matters present; and also the small amount of mercury, and that the two metals would have to be brought into actual contact before they could combine; it would, I think, have been rather strange had amalgam been formed. It is not enough that silver and mercury be brought in contact with each other to make them combine; but, in many cases, it requires heavy friction; and in a thick paste mass like a torta, the difficulties would be much increased. When the chloride of silver is in solution in common salt, then we have a chemical action going on by which we can better understand why amalgamation takes place.

The next argument used against the formation of chloride of silver is founded on the fact, that it had failed to be detected in tortas which had been left in the patio for months, without mercury I presume. The following experiments made by myself may entirely account for this:

The first experiment was on pure sulphide of silver. To this was added a small portion of bi-chloride of copper and salt, and the result was an abundant formation of chloride of silver.

The next experiment was made with common silver ore of moderate richness, which, besides sulphide of silver, contained also sulphides of iron. To this were added the usual quantities of sulphate of copper and salt, and the result was, that chloride of silver was formed after a few hours' standing; but, at the end of three days, I was surprised to find that the whole of the chloride of silver had again disappeared. The experiment was prolonged for three weeks, and tested daily for chloride of silver, thinking it might reappear; but it did not. This experiment was repeated at various times, and with different ores; and in every case chloride of silver was formed, but in some instances only did it disappear on standing. I may here observe that the chloride of silver held in solution at one time in a torta must necessarily be very small, from the fact that the quantity of salt used is only sufficient to hold a very small quantity in solution at once; so that in making such experiments as the above—unless the ores used be very rich, and a large excess of salt be added—one must not expect to obtain an abundant formation of chloride, but rest contented with finding a moderate proportion, as the process is one which goes on but very slowly indeed.

It became a question why the chloride of silver, when once formed, disappeared again? This I tried to discover by numerous experiments on a small scale. In tortas, where large quantities of sulphide of iron, particularly of the white variety, was present, the chloride of silver was decomposed, and chloride of iron formed; the silver being again probably converted into sulphide. [With artificial sulphide of iron, chloride of silver is very rapidly decomposed, particularly when heated.] Sulphides of copper had no action on chloride of silver. Where galena was present, the chloride of silver was very rapidly decomposed, and chloride of lead formed. Blende had a similar effect; and this may

explain why in *Zacatecas*, and some other districts where the ores contain blende, and sometimes small quantities of galena, they are obliged to use an excess of magistral for the purpose of first decomposing these sulphides. We are also aware that if sulphate of copper and salt be added to galena and blende, that chlorides of lead or zinc would be formed; and there are doubtless, many local actions taking place in tortas, which may vary very much with the nature of the ores operated upon. I have withheld many experiments made on a small scale on the subject; believing that it is only by close attention to the many various changes which take place in the tortas themselves, that a true knowledge of the theory of the patio amalgamation can be arrived at, and that laboratory experiments often only tend to lead us astray, unless corroborated by actual results on a large scale.

To prove further the formation of chloride of silver in the operation, I have obtained numerous samples of tortas in actual operation, after the salt and magistral had been added, but before the addition of the mercury. In every case did I find chloride of silver; and even when the mercury was present, in tortas far advanced, chloride of silver was always found. My general method of testing was to digest the sample for a short time in a solution of hot common salt; then filter, and add to the filtrate a clean piece of copper, upon which the silver was precipitated. In some cases the sample was digested in weak ammonia, filtered, and an acid added to the filtrate, which precipitated the chloride of silver.

From what has been said, it is very evident that, at the commencement of the amalgamation, there must be a considerable quantity of free chloride of copper present; because the whole of the ingredients necessary to carry on the operation to the end are added at once, and yet the torta does not become *hot*—provided of course the ingredients have not been added in excess. How is this? The only answer I can give is, that the patio amalgamation is founded on the affinity existing between sulphide of silver and chloride of copper, and that if the torta become *hot* at the commencement, when an excess of materials were not added, then we would have no such process as the patio.

When a torta is *very hot*, amalgamation does not go on nearly so rapidly as at other times. This may be owing to the mercury becoming covered with a coating of chloride, thus preventing the chloride of silver from being reduced.

Now, according to Mr. Bowring's theory, that the first action which takes place is the conversion of part of the mercury into chloride, the torta ought to become *hot* at the very commencement, whereas such is not the case; and to avoid loss of mercury in this way, Mr. Bowring proposes, and has patented, the use of protochloride of copper instead of magistral.

\*Mr. Louckner, whom I have before had occasion to mention in these pages, was a gentleman of the highest scientific attainments, and had studied closely, for upward of thirty years, every thing connected with the reduction of silver ores in Mexico. He had also written what, I have no hesitation in saying, would have been the most valuable treatise which has yet appeared on the subject, but which, I regret to state, is lost to the world. In 1855, Mr. Louckner was travelling from Angahuan to Guanajuato, having with him his MSS. At a certain part of the road he was attacked by robbers; and, on attempting to defend himself, his pistols missed fire. He was then overpowered, robbed, severely wounded, and left on the highway for dead. When he recovered himself, he found his papers and MSS. torn and scattered to the winds. Mr. Louckner died four and a half years afterward in Guanajuato.

LECTURE.—We had the pleasure of hearing Mr. LEIGH HARNETT's address before the Bible Temperance Society on Sunday week, on "The Power and Genius of America." The address was not only an able effort, but a very grateful and gratifying tribute to our Country, coming, as it did, from an educated Englishman. His sentiments he claims are but the sentiments of the great mass of his countrymen. If such be the case we may rest assured that the heart of England is with us in this hour of peril. The address occupied an hour in delivering, during which the speaker sustained himself with great ability, and showed himself thoroughly acquainted with the present condition and future destiny of America. Mr. H. is an unflinching Union man, and a firm believer in Manifest Destiny. Would to God there were more like him!

## Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - - Proprietors.

### Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEROTYPING and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

### To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and *four dollars*, or *two dollars* for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

### SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign application has been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitor in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will accept the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.



## SAN FRANCISCO MINING NOTICES.

## ASSESSMENTS LEVIED.

Assessments upon Mining Stocks have been levied as follows:—

Garabaldi.—Assessment of \$1 per share, levied March 2nd.

Sutro.—Assessment of \$1 per share, levied Feb. 23, payable March 23.

Silver Quartz Mill Co.—Assessment of 5 per cent. levied Feb. 23, payable March 28.

Helvetia.—Assessment of 25 cts. per share, levied Feb. 17, payable March 10.

Zouave.—Assessment of \$1 levied Feb. 22, payable Mar. 21.

Rogers.—Assessment of \$5 per share levied Feb. 4, payable Mar. 15.

Sam Wright.—Assessment of 50 cts. per share levied Mar. 2, payable immediately, delinquents to be sold Apr. 2.

Napoleon (copper).—Assessments of \$3 per share levied Mar. 3, payable in 30 days.

Golden Age.—Assessment of one dollar per share levied Feb. 24, payable March 26.

Washoe Gold & Silver.—An assessment of 2 per cent. on capital stock was levied Feb. 16, payable Apr. 1.

Rhodes' Diggings.—Assessment of 25 cts. per share levied Feb. 26, payable Mar. 5.

Texas Co., at a Meeting held Feb. 14, levied an assessment of one dollar per share, payable to the Secretary in Virginia City.

Santa Rosa Co.—February assessment of 20 cents per share now due and payable.

Madison Co.—An assessment, two dollars per share, was levied Feb. 17, payable immediately, at Office, 600 Merchant St.

Union Co.—An assessment of one dollar per share was levied February 16, payable on or before March 25.

Pena Co.—An assessment of \$3 per share was levied Feb. 5, one half payable March 1, balance April 15.

Kossuth Co., Devil's Gate District.—An assessment of 10 cts. per share was levied Feb. 7.

Constitution Company levied an assessment of 25 cts. per Feb. 11, payable immediately.

La Plata Oro Co. levied an assessment of five dollars per share, Feb. 9, payable at Office of the Secretary in Virginia City.

La Plata Co. levied an assessment of 50 cts. per share Feb. 2nd, payable at Office of the President.

Alamo Co. levied an assessment of 50 cts. per share, Feb. 11, payable on or before March 20, at 115 Cal. Street San Francisco, or at office in Carson City.

Tucker Co. levied an assessment of 25 cts. per share, Feb. 11, payable immediately at 608 Merchant St.

Hawley Co. levied an assessment of one dollar per share, on Feb. 9, payable on or before March 12, to Superintendent at the mine, or Secretary at Office.

Slate Range Co. levied an assessment of 50 cts. per share, Feb. 4, payable, March 15.

Moss G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., or to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 75 cents per share, Jan. 27, payable to the Secretary, at 428, Montgomery St.

El Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to the Supt.

Gaudaloupe S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or to the Superintendent at the mine in Aurora, (Esmeralda.)

Dios Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cents per share was levied Jan. 24, payable immediately.

Sonora Mining Co.—An assessment of 25 cents per share was levied, Jan 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount David-on Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Airatic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norecross.—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skae, at the Mine, on or before Feb. 25.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

Hale & Norecross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and C St., Virginia City.

Baltimore America Consolidated.—An assessment of 50 cents per share was levied, Jan. 5.

Savage.—An assessment of \$35 cents per share was levied, Jan. 7.

Hawley.—An assessment of \$1.00 per share was levied Feb. 9, payable March 12.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

## ASSESSMENT SALES.

Sales of Stock for non-payment of assessments are advertised to be sold as follows:—

Oriental Tunnel Co. will sell, on Saturday, Mar. 28.

Mars will institute proceedings against delinquents, Mar. 16th.

Planet will institute proceedings against delinquents Mar. 16th.

Moray Co. (V. City.—Suits for delinquent assessments will be commenced, March 14.

Michigan Co. (Gold Hill) will commence suits for delinquent assessments, March 16.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

## GENERAL NOTICES.

Yellow Jacket.—Corporate Deed now ready for signature at office of H. G. Maynard, Gold Hill, N. T.

Jenny Lind (Esmeralda).—Owners of ground in this Cot are requestes to call and sign deed of trust at 608 Merchants St.

Mount Hope Co.—Persons claiming stock are requested to present title papers for examination till March 16.

U. S. Mining Co.—All persons claiming stock are requested to present title papers for examination at Nos. 7 & 8 Government House.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

THE SWEETZ [Co., Gold Hill, give notice that Baltic

Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Bach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

*The Mining Interest!*

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

*The Inventor!*

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

*The Mechanic and Manufacturer!*

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

*To Chemists, Architects, Millwrights and Farmers!*

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers:—Four Dollars per annum.

## Club Rates.

Five Copies for Six Months, \$6.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80 Names can be sent in at different times and from different Post-offices Specimen copies will be sent gratis to any part of the country.

## EWER &amp; SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## DR. VAN ZANDT,

Consulting Physician and Surgeon.

## OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity Made Subservient for the Cure of all Nervous and Spinal Diseases

THAT THIS PRINCIPLE, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanting by physicians to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

## Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

## Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

C. W. THOMAS, Plating Mill, California street, facing the Mission R. R. Depot. San Francisco.

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts. m1

D. R. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner. ap16

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T. my23

PALMER, HANSCOM & Co. Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market. my29



[FROM THE LONDON "MINING AND SMELTING MAGAZINE."]  
THE MEXICAN METHOD OF AMALGAMATION.

BY JAMES NAPIER, JUN., F. C. S.  
Late Chemist and Assayer to the Guanaxuato Mint, Mexico.

CONCLUDED.

THEORY OF THE PROCESS.

HAVING now given a brief sketch of the mode in which the Mexican amalgamation is carried out, I shall pass on to consider what chemical action takes place in this most interesting process. Before doing so, however, let us consider for a moment two terms—*heat* and *cold*, used in these papers.

*Heat and Cold.*—There are two kinds of heat: one is caused by there being added a superabundance of magistral; the other is induced by cold, and is called "*calor de frio*." These differ only in cause, the result in both cases being the destruction of mercury. If a *hot* torta be heated by artificial heat, the chloride of mercury will act on the sulphide of silver in the same manner as the chloride of copper, forming chloride of silver and sulphide of mercury.

On cold mornings the tentaduras, or samples, often show signs of heat, in which case the action is called *calor de frio*—heat from cold; but, as the day advances, and the sun begins to act on the torta, the effect passes off. In the winter season, a somewhat less quantity of magistral is necessary for carrying on the operation than in the summer months: the amalgamators begin to decrease the quantities of magistral about the beginning of September.

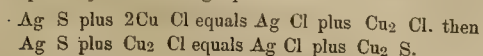
When a torta becomes hot from the use of a superabundance of material, a quantity of wood ashes or lime is added for the purpose of decomposing the excess of bi-chloride of copper to protochloride.

The term *cold* simply implies that the operation is not going on so fast as it ought, and that a sufficient quantity of magistral has not been added; if the torta be allowed to remain long in this state, a large quantity of mercury is apt to be lost in the form of oxide.

*Theories of the process.*—According to Sonneschmidt, the only theory which the Amalgamators had before his was, that the salt cleaned the silver, the magistral heated it, and that both reduced it to the metallic state so as to combine with the mercury. They were also aware that, for each ounce of silver produced there must be lost an equal weight of mercury; but *why* this should be so, was a problem they could not solve, and all mercury lost beyond this they considered mechanical.

*Sonneschmidt's Theory.*—Sonneschmidt after many years of practice and careful experiment, published a most valuable treatise on the various methods practised in Mexico for the reduction of silver ores, and lays down for the patio amalgamation his theory, which may be briefly stated as follows:—

The ingredients added to a torta, are salt, magistral (sulphate of copper,) mercury, and sulphide of silver. The salt and magistral act on each other, and form a bi-chloride of copper and sulphate of soda; the bi-chloride of copper next acts on the sulphide of silver, forming chloride of silver, which is dissolved in the excess of salt added; and the silver is next reduced to the metallic state by the mercury forming calomel and amalgam. This was Sonneschmidt's theory, which to the present day is almost universally received as the true one. However, since his time it has been further shown, that the proto-chloride of copper, formed by the action of the sulphide of silver on the bi-chloride, is dissolved in the excess of common salt, and acts on another portion of the sulphide of silver, reducing it to the state of chloride to be acted on by the mercury, and be converted into amalgam. It has also been shown very satisfactorily by Rossingault, who has devoted some time to the subject, that the copper of the sulphate is ultimately converted into a sulphide by the following equation:—



Sulphide of mercury is also at times found in tortas, and it has been supposed that this is formed by the calomel acting on the sulphide of mercury; but may it not be formed, as in the arrastres, by the direct action of the mercury on the sulphide of silver? Some amalgamators suppose that the copper is ultimately converted into oxychloride.

*Bowring's Theory.*—In 1848, Mr. John Bowring, who has

had much practice in the patio amalgamation, as carried on in Mexico and Peru, read a paper before the British Association, in which he denied that chloride of silver was formed at all in the process. His principal reason was founded upon experiments made in *Guadalupe-y-Calvo*, in Mexico, where he states, chloride of silver could not be found even after leaving the tortas in the patio in working order for the space of four months. In 1858, Mr. Bowring also published a pamphlet in Mexico defending the same idea; and describing, as he likewise did in the paper mentioned, a new theory, the basis of which I translate from his pamphlet:—  
"It is," he writes, "well known, that the materials which are employed in the reduction of the sulphides of silver, consist of salt, sulphate of copper, and mercury; and that, by employing only two of these ingredients, nothing will take place. I mixed the three in an appropriate vessel, and found that the mercury combined with half of the chlorine contained in the bi-chloride of copper, and thus formed a proto-chloride of both metals. This combination of the latter metal—copper—has the property of absorbing oxygen; hence, we may suppose, that this element is the principal agent in the operation. I made some proto chloride of copper, tried it in the patio, and obtained a good result.

"According to the theory which this mode of treatment establishes, the bi-chloride of copper gives an atom of its chlorine to the mercury, and both metals are converted into proto-chlorides; the chloride of copper absorbs oxygen, which combines with the sulphur of the silver, forming sulphuric acid, and leaves the silver in a metallic state to amalgamate.

"The sulphuric acid formed by the sulphur of the silver and the oxygen of the proto-chloride of copper, decomposes the common salt, and the chlorine disengaged in this way combine in either of the two following methods:—1st. With the protochloride to form again a bi-chloride. 2nd. With the chloride of the protoxide of copper, which, absorbing another equivalent of oxygen, passes to the state of oxy-chloride, or chloride of the peroxide. According to my mode of thinking, the protochloride of copper produces in the beneficio (amalgamation) an effect analogous to nitrous acid in the manufacture of sulphuric acid. It is easy to imagine that the protochloride of copper, after it has absorbed oxygen from the air and water, and given it up to the sulphur, will return to repeat the same operation."

Mr. Bowring then gives the following proofs of his theory:—

"I. Dissolve, in a glass or porcelain vessel, salt and a small quantity of sulphate of copper, with this mix some mercury, and at the end of a few hours there will result a white powder which is protochloride of mercury: filter the solution, and precipitate the copper with caustic soda or potash. The orange colour indicates a salt of the protoxide; and if care be taken to gather on a filter the white powder, it will, in contact with caustic soda and ammonia, be converted into the protoxide of mercury, which may be known from the black colour it assumes. If the solution of proto-chloride of copper be left exposed to the air for a longer time, there will form on the surface a yellowish green crust, which is a chloride of the protoxide of copper.

"II. Beneficiate (amalgamate) a small quantity of ore, containing sulphide of silver, with salt, and bi-chloride of copper chemically pure; at the conclusion of the operation add distilled water; filter, and precipitate the solution with nitrate of baryta; when it will be found, that there has been a formation of sulphuric acid equivalent to the sulphur which was combined with the silver. It is to be noted that this sulphuric acid could not have been formed without the presence of oxygen, which, without doubt, resulted from the absorption of this gas by the proto-chloride of copper.

"III. Amalgamate silver ore with bichromate of potash and sulphuric acid (it is known that the chemical action of these two latter on each other is to evolve oxygen,) and it will be found that there is formed an amalgam of silver. In the same way, any materials which produce oxygen may serve in the amalgamation.

"IV. Take the amalgam of a tentadura (sample) of a torta which is in good working order, that is in such a condition that when the amalgam is pressed with the finger it gives out a white powder; dissolve this in pure nitric acid, and afterwards with distilled water, when it will be found that the white powder which remains is a protochloride of mercury." Again, in the same pamphlet, Mr. Bowring

states: "The difficulty there is in working ores containing chloride of silver (like those from the district of *Catoro*) demonstrates clearly the nonfoundation of the formation of chloride of silver in the common patio amalgamation. Thus, we have Mr. Bowring's reason for rejecting the theory of Sonneschmidt, and denying that chloride of silver is formed, and also the theory of his own which he proposes to substitute.

*Uslar's Experiments.*—In 1853, Dr. Uslar published a pamphlet in Mexico, comparing the patio with the bath amalgamation, in which he, like Mr. Bowring, denies that chloride of silver is formed in the patio. He argues, that if the silver were converted into chloride, some other metal, such as copper, might be substituted for the mercury until the whole of the silver was reduced to the metallic state, and he instituted experiments to prove that such would not answer. Thus he introduced into a torta a superabundance of materials—salt and sulphate of copper, and some metallic copper. The result obtained was, no silver reduced, and the conversion of the greater part of the metallic copper into chloride. The next experiments were made with a view of protecting the mercury by copper or iron. The results were:—where iron was used, there was no amalgamation at all, the mercury coming out as it went in, without amalgam; but, where copper was present, the result was different, the amalgam containing a large quantity of copper with but little silver. The conclusion drawn by Dr. Uslar from the above experiments was, that the persistence of other metals is against the amalgamation.

In a third series of experiments, there was put into the torta double the usual quantity of salt; in two days afterwards the magistral was added, and the whole trodden at intervals during fifteen days. Then iron was added, and the mass again trodden; and two days after this the mercury was added; but the torta showed no symptoms of entering into amalgamation, and after remaining eight days longer in the patio, and being trodden daily, the mercury was taken out as it was put in, without amalgam. Hence, Dr. Uslar comes to the conclusion that it is not true that chloride of silver is formed by the salt and sulphate of copper, and reduced by the mercury; because, with the extra quantity of materials, chloride of silver ought to have been formed, the iron ought to have reduced it more rapidly than the mercury, and amalgam ought to have been formed; but nothing of the kind took place. He also argues, that as ores, containing native chloride of silver, cannot be worked by the patio amalgamation, it therefore cannot be formed by it. However, Dr. Uslar, unlike Mr. Bowring, proposes no new theory.

*Consideration of the Theories.*—Having now stated the various opinions generally entertained regarding the theory of this process, I shall venture a few remarks which may not prove altogether uninteresting, and may help to throw some further light on the subject. An apparently very strong argument used by Bowring and Uslar against chloride of silver being formed in the patio amalgamation is, that native chloride of silver, according to them, cannot be worked by that process. This might even be quite true, and yet chloride of silver be formed in the process; for we have only to consider the physical properties of the native chloride, to take a different view of the matter. It is a very hard horny substance, which, even in ammonia—probably its best solvent—will take some time to dissolve. Now, if a torta, the solution of salt is comparatively weak; it is also cold, and will dissolve but a very small portion of the newly-formed chloride; but of native chloride (or horn silver,) I question much whether the usual strength of the salt in a torta would be strong enough to dissolve any. Mr. Edward Lou-kner\* has often assured me that horn silver can be reduced very well, in fact, better than any other compound, in the patio, providing that great care be taken in the grinding, so as to have it in the smallest possible state of division, and that an excess of salt be added in the operation.

Another argument used by Dr. Uslar, to prove that chloride of silver is not formed in a torta is, that if such were the case, it ought to be precipitated or reduced by another metal, such as copper, or iron, previous to adding the mercury.

Now, metallic silver can be produced from the sulphide by various methods; but there is a great difference in the ease with which silver produced by such different methods will



**ANOTHER DIVIDEND-PAYING MINING COMPANY.**—The Imperial Silver Mining Company have just declared a first monthly dividend of 1½ per cent. on \$1,000,000, the amount of capital stock issued. This company was recently incorporated in this city, and consists of a number of mines and mills at and near Gold Hill, N. T., the various parties representing which have united their interests. Among the consolidated concerns is the Washoe Gold and Silver Company No. 1, well known in this city as the pioneer company in the mill enterprise of Nevada Territory.

**LADY BRYAN.**—This stock has been more largely dealt in in this city, the past week than any other in the market. It commenced at \$7 and has been gradually advancing until to-day it has reached \$25, with a still upward tendency. The cause of this movement is attributable to a rich strike at the mine, disclosing rock strongly resembling the Ophir. A quantity of this rock has been received in the city, and may be seen at No. 40, Montgomery Block. Some sanguine holders are looking for very high figures at an early day.

## GENERAL MINING STOCK REPORT.

### REPORT OF SALES

At the San Francisco Mining Stock Board,  
For the week ending March 28, 1883.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2535	2550	2575	2500	—	2500
Gould & Curry	4,800	4	500	3200	3200	3200	3200	—	—
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	5,600	4	300	550	555	—	300	—	—
Potosi	2,800	2	400	350	370	375	350	325	325
Hale & Norcross	800	2	500	750	—	—	—	—	—
Sierra Nevada	8,000	4	600	75	80	75	75	—	75
Dancy	8,000	4	600	—	—	—	—	—	—
Burning Moscow	4,800	2	100	180	187½	170	125	135	140
North Potosi	2,000	1	300	30	30	30	27½	30	30
Rogers, F. D.	3,000	1	250	14	16	—	16	16	16
Meredith	7,200	2	125	42½	42½	41	45	45	—
Charles Caney	1,800	1	30	65	70	65	67½	71	67½
Sacramento	1,800	1	500	40	61	50	62½	59	60
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	6,000	1	100	—	—	—	—	—	—
Savage	800	1	—	1150	1200	1200	1225	1325	1400
Iowa	—	—	—	—	—	—	—	—	—
El Dorado	—	—	—	65	65	65	60	65	60
Norton	1,600	1	—	17	13	23½	—	20	18
La Crosse	—	—	—	—	—	—	—	—	—
Mesa	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	45	41	41	42½	35	40
Adriatic	—	—	—	5	6½	7½	7½	7	7
Cedar Hill Tunnel	—	—	—	7	7	6½	7	6½	6½
Mount Davidson	10,000	3	200	62½	5½	6½	6½	6½	6½
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	4	60	385	365	372½	325	370	360
Antelope	1,200	1	500	280	280	387½	300	315	317
Esmeralda	1,600	1	1000	42	25	40	—	—	—
Red Bl. Monte	4,400	1	400	100	—	85	100	100	100
Eltona	1,200	1	100	6	—	6½	5	—	—
Utah	—	—	—	95	90	70	70	—	—
Silver Hill	3,000	1	—	53	54	55	—	—	—
Nevada	—	—	—	35	25	20	20	—	18
<b>COSO STOCKS.</b>									
Josephine	—	—	—	21	22	22½	23	21½	22½
Coso	—	—	—	20	—	—	—	—	—
Willow Springs	—	—	—	16½	16	15½	12½	17	17½
<b>MEXICAN MINES.</b>									
Mina Prieta	—	—	—	—	—	—	—	—	—
Dias Padre	—	—	—	55	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	—	—	—	21	20	19	17	16	20

### TRANSACTIONS IN SHARES, FOR THE WEEK.

#### NEVADA STOCKS.

Gould & Curry—4 at \$3200  
Ophir—20 at \$2575; 36 at 2600, b. 30 ds.  
Potosi—15 at \$360; 10 at 380; 20 at 375 46 at 350  
Chollar—20 at \$575; 20 at 600, b. 30 ds.  
Chas. Caney—10 at \$75  
Burning Moscow—40 at \$190; 170 at 190, b. 10 ds.; 40 at 145, b. 10 ds.; 30 at 135, b. 10 ds.; 50 at 140 b. 10 ds.; 10 at 135; 10 at 137½  
Cole—70 at \$13  
Lady Bryan—50 at \$7; 10 at 7½; 40 at 7½; 100 at 10; 200 at 10½; 155 at 17 b. 30 ds.; 25 at 17; 20 at 16½; 14 at 18; 160 at 21; 38 at 21½  
Adriatic—15 at \$8; 10 at 7  
Burnside—10 at \$42½; 10 at 40; 30 at 40 b. 30 ds.  
Mount Davidson—25 at \$7½; 20 at 7½; 40 at 7; 10 at 6½; 10 at 7  
North Potosi—25 at \$30; 15 at 30  
Cedar Hill Tunnel—60 at \$7; 50 at 7½; 72 at 6¾  
Lucerne—24 at \$14; 10 at 13; 80 at 16 b. 30 ds. 10 at 13  
Nevada—5 at \$45  
Sierra Nevada—10 at \$80

Savage—10 at \$290 b. 30 ds.  
Eldorado—10 at \$70  
Bullion—23 at \$1  
Meredith—20 at \$46; 38 at 45  
Reese River—25 at \$6; 20 at 6  
Hazel Green—60 at \$4  
Madison—9 at \$14  
Recorder—7½ \$17  
Coryell—50 at \$50 br. 30 ds.

#### ESMERALDA STOCKS.

Wide West—5 at \$365, s. o. 10 ds.; 32 at 380 3 at 375; 7 at 370

Antelope—10 at \$300  
Silver Hill—10 at \$53; 10 at 54; 10 at 55; 10 at 55½  
St. Louis—50 at \$2½; 100 at 3 b. 30 ds.  
Golden Age—10 at \$25  
Alamo—25 at \$7  
Union (Russ Dist.)—25 at \$3½

#### COSO STOCKS.

Willow Springs—20 at \$20 b. 30 ds.; 20 at 17; 20 at 18  
Josephine—40 at \$22½; 25 at 23

#### COPPER STOCKS.

Napoleon—20 at \$19½

### VIRGINIA CITY STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Ask'd		Bid.	Ask'd
Ashland	\$7	9	Koh-i-noor	\$75	—
Adriatic	—	7	Leon	15	—
Allen	60	70	La Crosse	12	16
Atchison	—	150	Laboring	10	—
American Basin	—	—	Mashtou	—	7½
Burnside	—	15	McBee	—	—
Battle	—	20	Millon	—	70
Birdsall	40	45	Mary Ann	—	26
Bullion (consolidated)	40	45	Monterey Co. (Spring Val)	—	—
Burnside	50	55	Monarch	—	—
Burning Moscow	200	210	Mullison	22	26
Beach & Paxton	250	325	Mohagan	6	—
Baltimore American	10	12	North American	7	9
Bald Eagle	3	4	Nevada	6	—
Bloomingdale	5	6	North Ophir	—	—
Blue Ledge, (Reese River)	—	—	Oranthal	4	6
Buchanan	90	100	Osceola	15	—
Belcher	150	175	Pride of the West	75	90
Brauch Mint	—	10	Pioneer	—	—
Cedar Hill Tunnel	7	7½	Pride of Washoe	25	30
Caledonia	10	12	Peyton	35	40
Comet (Simpson's Park)	—	—	Philadelphia	—	—
Cole	15	20	Recorder	20	—
Commercial	—	4	Santa Rita	50	—
Consolidated Cedar Hill	—	4	Santa Fe	—	—
Dargan	—	6	Summit	—	—
Dayton Company	—	—	Sweezy	—	—
Deatur	—	—	St. George	—	—
Dun	5	7	Sinaloa	9	10
Desert	—	—	Sierra Nevada	65	—
Empire	—	5	Sierra	22	—
El Dorado	90	—	Sacramento	50	55
Eureka	35	40	Sigel	—	—
Eveug Star, Argon's Dist	—	—	Shamrock	11	16
Empire Co. (Spring Val.)	50	55	South Burnside	6	8
Governor Nye	7	8	Texas	—	—
Golden Gate	5	—	Union (Virginia District)	100	—
Grass Valley	20	—	U. S. Mining Company	5	—
Golden Era	—	—	Union, Gold Hill	40	45
Golden Eagle	—	10	U. S. Tunnel	—	—
Hazel Green	—	5½	Uncle Sam	—	—
Harrison Co., Geller Ledge	30	—	Utah	45	60
Hawkeye	—	20	Virginia	—	—
Hawley (Spring Valley)	—	20	Washington Ledge	10	15
Industrious	—	20	York	4	6
Irving	—	—	Yolo	10	12
Insurance	15	25	Yellow Jacket	200	225
			Zouave	20	—

### WASHOE STOCK REMARKS.

[COMPILED FROM THE DAILY TERRITORIAL ENTERPRISE.]

#### MONDAY EVENING, March 16, 1883.

The stock market has been quiet to-day, owing, doubtless, to some extent, to the employment of a majority of the brokers in the formation of a new Stock and Exchange Board. The Board is now organized, and will be ready for action at an early day. There has not been much enquiry for stocks to-day. Potosi is in request at an advance, \$190 and 200 having been offered. The cause has not been publicly transpired. Birdsall is held firmly at \$40, with little disposition to sell. The location is regarded with favor. El Dorado is held firmly for advanced figures. There is considerable activity in Gold Hill stocks, particularly in the way of law suits. The Belcher is in trouble, the Leon and Sinaloa having brought suit against that company, while the latter is reaching for the new ledge struck by the Bay State. Of course the effect will be to reduce the prices of all the claims in dispute. Three suits upon a claim at one time are a heavy burden to carry. The following sales are reported by Platt & Low, of Gold Hill. Dunn at 7, 50.

#### TUESDAY EVENING, March 17th, 1883.

A deal of mystery has characterized the operations of brokers to-day. Much whispering has been observed—much significant counselling on the corners. Yesterday there was inquiry for Potosi at \$200 to 225. Operators stared and wondered what had created the demand. A startling development in the mine was the accepted explanation, but to-day brokers know better. The character of the forthcoming decision in the Chollar-Potosi has leaked out, and rumor now confidently asserts that the Potosi is largely gainer by it on the ground. Hence, Potosi is up, and \$350 is not regarded as an extravagant price for it. Shamrock has been selling for \$7 at 12, and probably 250 feet changed hands. Grass Valley has been saleable at an advance. It may be quoted at \$12 15. Pride of Washoe is looking up, 60 feet having changed hands to-day at \$25 @ 30. Bullion and Birdsall are saleable at our last quotations; 25 feet of Birdsall sold at \$37 50. The

following sales are reported by Platt & Low, of Gold Hill: Thirty feet Pride of Washoe at \$18; 10 feet Dunn at \$7; 20 feet Pride of the West at \$70, 20 feet Overman at \$35.

#### WEDNESDAY EVENING, March 18th.

There has been considerable life in the stock market to-day, and the number of transfers has been comparatively large. Potosi is still on the advance. It cannot be quoted at less than \$400, and but little is obtainable at these figures. The Shamrock has been in light request in advance on our quotations of yesterday. We understand that very fair looking rock is being taken from the mine. Zouave may be quoted at \$21 @ 22 50. As a majority of this stock is held at the Bay, a further advance is looked for. Bullion is again in request, and is marketable at \$40 @ 45. The Princess, at Gold Hill, is in demand at \$40 @ 50, and the inquiry for it at these figures is exceedingly lively. This claim adjoins the Union on the north and is likewise in litigation for the ledge claimed by the Yellow Jacket. There are but 600 feet in the claim. The following sales are reported by Platt & Low, of Gold Hill: 22 feet Overman at \$30; 20 feet ditto at \$36; 10 feet Dunn at \$8.

#### THURSDAY EVENING, March 19th.

The market has not been remarkably lively to-day, nor the transfers of especial moment. Potosi has fluctuated greatly, owing to the unexpected decision, or forthcoming decision, of the Supreme Court. From \$476 it receded to 200, but will probably revive somewhat before many days, or as the character of the decision is understood. Very fine specimens of ore from the Santa Rita are being exhibited, and the stock has advanced to \$50, at which figures 22 feet sold to-day. El Dorado is upward in the market, and has found buyers to-day at \$75. Birdsall is in request at \$45 @ 50, with more buyers than sellers. Pride of Washoe is marketable at \$25 @ 40, with considerable inquiry. Fifty feet changed hands to-day on private terms. Bloomingdale is again marketable at low figures. The company was incorporated to-day. Harrison, incorporated stock, may be quoted at \$25 @ 35. 10 Feet sold at \$30. Hazel Green can be sold at \$4 @ 5, Zouave at \$22, Osceola at \$15, Moray at \$30. Bullion is saleable at \$45, Eureka at \$30, Princess and Union at \$45 @ 50, Bay State at \$100, Buchanan at \$100, Dunn at \$7 @ 8, and Leon at \$20.

#### FRIDAY EVENING, March 20th

The day has been disagreeably stormy; yet the stock market has been comparatively lively. Potosi has not receded to the prices anticipated yesterday. Operators in San Francisco are not disposed to go into much of a panic on mere rumor. They are awaiting the decision. Telegrams announce that it is still held at \$425 @ 450. Fairview is advancing, and is saleable at \$36. Thirty feet sold to-day at these figures. Bullion is in request at \$40, and is marketable at 45. Fifty feet sold at \$40, and thirty at \$75. The Princess, at Gold Hill, is in demand at \$40 @ 50, and might be sold, probably, if in market, at \$50. The Bloomingdale has been in request to-day at \$5 @ 7. Sixty feet sold at an average of \$6. The El Dorado is held firmly at \$75 @ 80, with little in market. Ten feet sold to-day at \$75. Beach & Paxton is marketable at an advance on our last quotations, and cannot be quoted at less than \$325 @ 330. Five feet sold to-day at \$25. Birdsall is quoted at \$40, at which figures 18 feet sold to-day. Eureka, Gold Hill, is saleable at \$30 @ 35, with little in market. Zouave is quoted at \$21 @ 22, with a fair demand. The Insurance, west of the Beach & Paxton, is saleable at \$5 @ 6. Shamrock is rather on the decline. We quote it at \$15 @ 20. The following sales are reported by Platt & Low, of Gold Hill: 6 feet Gold Hill G. & S. M. Co. No. 1, (now called the Alpha), at \$400 per foot. 6 feet Gold Hill G. & S. M. Co. No. 2, at \$50 per foot. 20 feet Overman, at \$30; 10 feet Overman at \$35.

#### SATURDAY EVENING, March 24, 1883.

The business of this day has been rather light, although a number of heavy transactions are reported. Fairview has been in high request. 100 feet sold at \$40, and \$50 is now offered. Bloomingdale has been dealt in largely to-day. About 200 feet have changed hands at from \$4 to 7. The company is about penetrating its ledge at a depth of about 250 feet from the surface. \$10 is freely offered without takers. The Pride of Washoe is marketable at \$30; 32 feet sold to-day at that figure. Ashland is again meeting with request and may be quoted at \$10 to 12, with an upward tendency. The Santa Rita is advancing and is now held at \$35 to 60. Very fine ore is being exhibited from the mine. It is extremely gratifying to observe such evidences of value in the ledges back of Virginia. The Branch Mint at Gold Hill, is attracting some attention. Fine indications are developed a few feet below the surface. The Belcher is still advancing. It cannot be quoted at less than \$100 @ 125. The Princess, in litigation with the Yellow Jacket, is sought for at \$45 @ 50; 17 feet sold at \$50. Bullion is saleable at \$40 @ 45; 35 feet sold at 42 50.

### ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Asked		Bid	Ask'd
Amador	—	6	Heath	\$10	15
Atlantic	2	—	Live Yankee	15	—
Arcade	6	10	Lord Byron	8	—
Antelope	—	375	La Plata	10	12
Alturas	15	—	Mesa Esmeralda	—	55
Atena	6	10	Monroe	85	—
Brazo	—	6	McKinstry Tunnel Co.	3½	—
Brice Hall Consolidation	20	—	New Esmeralda Consul	—	15
Bright Star	15	—	Newton	50	—
Bamboo	—	—	Nevada	—	—
Bullion (Van Horu Dist.)	10	—	Nevada Tunnel Co., 1-46 sh.	650	850
Climax	—	10	Old Winnemucca	5	10
Citrus	—	20	Pack Tunnel Co.	—	2
Citrus	—	20	Pacific	5	10
Cape	—	109	Pond	—	100
Del Monte	—	9	Pride of Antelope	—	5
East Essex Ex. Ural	—	10	Peru (two ft. to the share)	8	10
Empire	23	—	Real Del Monte	—	20
Fallstaff	4	4	Strawberry	—	20
Fallstaff, Consolidation	4	5	Silver Hill	57	60
Fresno	9	9	St. Louis	—	5
Falls of Clyde	—	1	Tiger	—	4
General Hooker (Con.)	20	30	Union Tunnel	20	30
General Jackson	13½	14	Utah	75	90
Garibaldi	—	50	Union Tunnel	—	20
Golden Harvest	—	5	Ural prospect	550	600
Golden Cross	—	12½	Ural [extension]	—	10
Golden Age	—	20	W. L. Tel.	—	2½
Howard	—	12	Wide West	—	375
Howard Tunnel Co.	—	3	X-Elixir and Constantinople consolidated	1½	—



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary	Locality of Office.	Capital Stock.	Par Value	shrs per foot.	ass'ts to date	Name of Company	Locality of Mine	Name of Secretary	Locality of Office.	Capital stock.	Par Value	shrs per foot.	ass'ts to date	
RUTH WINDSOR TUN CO	Esmeralda District	T. L. Bibbins.	305 Montgomery st	\$100,000	\$100	1	\$	MONROE, G. S. & COPPER	La Paz, Colorado.	G. J. Turner.	606 Montgomery st	\$250,000	\$250	1	\$	
ANTOPEL SPUR	Esmeralda District	T. L. Bibbins.	305 Montgomery st	400,000	500	1	none	BLU RIDGE MINING CO.	Slate Range.	G. J. Turner.	606 Montgomery st	240,000	100	3 ft		
JEFFERSON	Esmeralda District	T. L. Bibbins.	305 Montgomery st	500,000	500	1	none	MADISON, SLATE RANGE	Slate Range.	G. J. Turner.	606 Montgomery st	264,500	100	2 ft		
COOK	Esmeralda District	T. L. Bibbins.	305 Montgomery st	200,000	100	1	none	SAN FRAN. SLATE RANGE	Slate Range.	G. J. Turner.	606 Montgomery st	210,000	100	2 ft		
CEADAR	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	none	CAYTEA MINING CO.	Slate Range.	G. J. Turner.	606 Montgomery st	195,000	100	2 ft		
SOTOGAME	Esmeralda District	T. L. Bibbins.	305 Montgomery st	14,000	100	1	none	TRIDITION	Virginia District.	N. Chiverick.	Mer. st. Montgomery	600,000	500	1		
SENECA	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	none	COLE	Virginia District.	W. E. Wood.	123 California st.	1,500,000	500	1	16,000	
RED WHITE & BLUE G & S	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	600	HAWLEY	Devil's Gate Dist.	C. Stevens.	6 Parrots Building	880,000	400	1	2,200	
LILLY OF THE WEST G & S	Esmeralda District	T. L. Bibbins.	305 Montgomery st	140,000	100	1	none	PETTONIA	Virginia Dist.	C. Stevens.	6 Parrots Building	1,000,000	100	1		
ESTICK	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	none	CLEAR CREEK	G & S	C. Stevens.	6 Parrots Building	1,100,000	500	1		
BELLION	Van Horn District	T. L. Bibbins.	305 Montgomery st	980,000	100	1	none	MASIDORA	Sonora, Mexico.	F. H. Waterman.	618 Merchant str.	240,000	100	1	none	
LAUREL HILL Mining Co.	Telescope District	C. S. Higgins.	410 Montgomery st	1,600,000	100	1	none	ESMERALDA DISTRICT	E. Daniels.	Cashier Custom H.	600,000	100	1	none		
UNION	Russ District.	C. S. Higgins.	410 Montgomery st	900,000	50	2	2,725	SACRAMENTO COAL	Sacramento Co.	E. Worth.	547 Washington st	570,000	500	1	700	
COMBINATION	Russ District.	C. S. Higgins.	410 Montgomery st	990,000	50	2	1,700	SAN WRIGHT	Aurora, Mono Co.	E. Worth.	547 Washington st	120,000	500	1	none	
BULLION	Russ District.	C. S. Higgins.	410 Montgomery st	400,000	50	2	1,700	ST. CLAIR	Aurora, Mono Co.	J. F. Bailey.	40 Montgomery Blk	800,000	500	1	600	
WHITE & MURPHY, G & S	Virginia District.	J. P. Nourse.	Lucas & Turners bg	126,000	500	2	23,000	FEDERAL UNION	Coso District.	W. W. Lawton.	Stevenson House.	1,200,000	250	1		
MINNA PRIETA	Sonora, Mexico	J. P. Nourse.	Lucas & Turners bg	2,200,000	100	1	68,000	JOSEPHINE	G & S	John Armstrong.	612 Merchant str.	120,000	200	1	300	
BURNING MOSCOW	Virginia District.	J. P. Nourse.	Lucas & Turnersbg	480,000	100	2	45,000	IRWELL	G & S	John Armstrong.	612 merchant str.	240,000	100	2	1,500	
BUCKEYE	Silver City	F. S. Carter.	415 Sansome st	180,000	100	1	3,200	NEVADA COPPER Mfg. Co.	Grass Val. Nev. Co.	J. H. Blood.	7 Montgomery Blk	60,000	50	1	none	
AMERICAN	Virginia District.	A. H. Clark.	522 Washington st	180,000	100	1	1,050	JACK HAYS	Esmeralda District	J. H. Blood.	7 Montgomery Blk	50,000	50	1	none	
FRANCES	Slate Range Distr.	A. H. Clark.	522 Washington st	105,000	500	1	1,050	TENNESSEE	G & S	J. H. Blood.	7 Montgomery Blk	100,000	100	1	none	
SLATE RANGE	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	SAN PATCH	G & S	J. H. Blood.	7 Montgomery Blk	100,000	100	1	none	
ROCHESTER	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	FULTON	G & S	J. H. Blood.	7 Montgomery Blk	100,000	100	1	none	
PAIDELPHIA	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	KOHLER BRO'S	G & S	J. H. Blood.	7 Montgomery Blk	100,000	100	1	none	
NEW YORK	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	LUCERNE MINING CO.	G & S	J. S. Paxton.	Sansome street.	24,000	100	1	none	
CATARAUGUS	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	MOUNT DAVIDSON G & S	Virginia District.	F. A. Fabens.	47 Montgomery Blk	2,000,000	500	44 in	20,500	
ALBANY	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	4,200	GOULD & CURRY	G & S	E. B. Holmes.	712 Montgomery st	900,000	125	2		
LADY BRAYAN	Flowers District.	David Wilder.	522 Washington st	440,000	150	1	5,000	PIONEER COAL	G & S	E. B. Holmes.	450,000	100	1	2,750		
DESERT M. CO.	Flowers District.	S. R. Rooney.	7 & 8 Gov't House	270,000	100	1	600	MANZANILLO	Sinaloa, Mexico.	R. T. C. Page.	428 Montgomery st.	600,000	500	1	none	
ADRIATIC	G & S	Humboldt, N. Ter.	Merch st. mt blik	120,000	100	1	600	MOSS	G & S	P. B. Cornwall.	608 Merchant str.	800,000	500	1	none	
EVERETT	G & S	Humboldt, N. Ter.	Merch st. mt blik	440,000	100	1	60	MADISON	G & S	P. B. Cornwall.	608 Merchant str.	400,000	1000	1	none	
NORTH STAR	G & S	Humboldt, N. Ter.	Merch st. mt blik	200,000	100	1	60	SOUTH UTAH	G & S	P. B. Cornwall.	608 Merchant str.	150,000	500	1	18 in none	
CRYSOPTS	G & S	Silver Mtn. mono.	Merch st. mt blik	300,000	300	1	1,380	MELONES & STANISLAUS CO.	Calaveras County.	L. Francani.	Lucas & Turner bg	500,000	100	1	6,000	
ESTRELLA DEL MONTNE	Humboldt dis. n.t.	J. H. Gager.	Merch st. mt blik	250,000	210	1	67	ALAMEDA COAL MIN'G CO.	Alameda County.	A. C. L. Wadsworth.	"	2,400,000	500	1	450	
MANHATTAN	G & S	J. H. Gager.	Merch st. mt blik	250,000	210	1	67	GOULD & CURRY	G & S	A. C. L. Wadsworth.	"	180,000	100	1	450	
LITE OAK COPPER	M.C. Co.	J. H. Gager.	Merch st. mt blik	600,000	500	1	none	KATE	G & S	Humbolt Nev. Ter.	"	180,000	100	1	450	
SIGEL	G & S	J. H. Gager.	Merch st. mt blik	245,000	100	1	none	OPHIR	G & S	Humbolt Nev. Ter.	"	5,040,000	300	12 in	none	
OCCIDENTAL	G & S	Emma Francis dis.	Merch st. mt blik	600,000	500	1	none	SANTIAGO	G & S	Silver City District	E. A. Breed.	"	2,800,000	1000	1	none
ANNIE LAURA	G & S	Humboldt District	Merch st. mt blik	670,000	100	1	none	NORRMAN	G & S	Calaveras county	E. A. Breed.	"	1,100,000	500	1	none
STARLIGHT	G & S	J. H. Gager.	Merch st. mt blik	120,000	100	1	none	NORRMAN	G & S	Virginia District.	E. V. Joice.	Cor. Bat. & Wash.	650,000	250	1	7,800
AEETNA	G & S	William Winchester	Aurora, Mono Co.	120,000	100	1	none	EARLY DAWN	G & S	Virginia District.	J. H. Brewer.	40 Montgomery Blk	1,500,000	500	1	110,000
ALHAMBRA	Devil's Gate Dist.	J. O. Strauch	315 Sansome street	100,000	200	1	14,300	PORTER	G & S	Devil's Gate Dist.	J. H. Brewer.	40 Montgomery Blk	200,000	250	1	none
WIDE WEST	Esmeralda District	S. Pattee	522 Montgomery st	1,760,000	400	1	6,400	SCORPION	G & S	Lamb Ledge.	R. C. Page.	420 Montgomery st	300,000	500	1	12,000
CONSOLIDATION	G & S	S. Pattee	522 Montgomery st	900,000	500	1	6,400	RUBY	G & S	Star District.	W. H. Martin.	617 Clay street.	120,000	100	2	120
REAL DEL MONTE	Esmeralda District	S. Pattee	522 Montgomery st	1,600,000	1000	1	13,200	SILVER CITY	G & S	Silver City.	O. Risdon, Jr.	Cor. Bat. & Bush st.	1,000,000	100	1	12,600
ESMERALDA Mining Co.	Esmeralda District	S. Pattee	522 Montgomery st	1,600,000	500	1	6,750	SUCCESS	G & S	Gold Hill District.	R. H. Waller.	1 montgomery blk	240,000	100	1	28,600
ESMERALDA, N. Extens'n	Esmeralda District	S. Pattee	522 Montgomery st	600,000	500	1	27,000	SILVER CITY	G & S	Silver City.	S. P. Vandyeke.	127 Clay street.	1,200,000	300	1	28,600
ESMERALDA	Esmeralda District	S. Pattee	522 Montgomery st	1,600,000	500	1	6,750	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
SILVER HILL, Consol'd	Esmeralda District	S. Pattee	522 Montgomery st	600,000	500	1	27,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
ANTOPEL	Esmeralda District	S. Pattee	522 Montgomery st	600,000	500	1	27,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
LOTTA	G & S	J. F. Pope.	115 California st.	900,000	300	1	47,250	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
ALAMO	G & S	J. F. Pope.	115 California st.	300,000	100	1	4,500	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
BELLA VISTA	G & S	S. Sprague	Cor Cal & Sansome	72,000	500	1	8,400	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
BURNSIDE	G & S	E. C. Lovell.	712 Montgomery st	280,000	100	1	8,400	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
BANDER	G & S	R. N. Van Brunt.	704 Montgomery st	800,000	400	1	15,600	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
IOWA	G & S	R. N. Van Brunt.	704 Montgomery st	1,200,000	1000	1	15,600	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
LABROBE TUD & Mfg Co	Virginia District.	R. N. Van Brunt.	704 Montgomery st	1,250,000	100	1	17,900	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
NORTON	G & S	R. N. Van Brunt.	704 Montgomery st	1,250,000	100	1	17,900	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
RESE RIVER	G & S	R. N. Van Brunt.	704 Montgomery st	1,200,000	100	1	17,900	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
SAN MARCIAL	Sonora, Mexico.	R. N. Van Brunt.	704 Montgomery st	264,000	90	1	17,900	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
SAYAGE Mining Co.	Virginia Dist.	G. B. McMeay.	712 Montgomery st	1,600,000	1000	1	108,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
CALIFORNIA	G & S	D. W. Young.	Cor Mont & Jckn.	1,050,000	300	13ft	14,400	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
CENTRAL	G & S	G. B. McMeay.	712 Montgomery st	540,000	300	1	108,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
CEADAR HILL M. & T. Co.	Virginia District.	C. L. Farrington.	509 Sacramento st	1,000,000	300	1	108,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
CHOLLAR	Virginia District.	W. E. Dean.	53 Montgomery Blk	1,850,000	300	4	2,800	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
CHRYSLAND	Silver City.	W. E. Dean.	53 Montgomery Blk	1,850,000	300	4	2,800	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
CROWD FOUNT	G & S	J. H. Jones.	321 Front street.	1,200,000	100	1	10,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
CHARLES CALEY	Devil's Gate Dist.	Gomer Evans	336 Montgomery st	54,000	30	1	10,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
CORCORAN	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	10,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
EMMETT	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	10,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
DOYLE	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	10,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
ISAACS	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	10,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
KOHLER	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	10,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
LIVINGSTON	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	10,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
VINEARD	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	10,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
LAS CRUCES Mining Co.	Mexico.	C. J. Brennan.	Cor. Jck'n & Front	225,000	125	1	1,000	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
DARE	Esmeralda District	Joseph R. Beard.	4 Armyory Hall.	1,600,000	200	1	400	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
LILY DALE	Esmeralda District	Joseph R. Beard.	4 Armyory Hall.	240,000	300	1	400	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
MAMMOTH, No. 1	Esmeralda District	Joseph R. Beard.	4 Armyory Hall.	210,000	300	1	350	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
MOUNT HOPE	Virgia. & Gold Hill	Thos Brownjohn	621 Clay street.	1,000,000	500	1	none	ALBANY	G & S	Silver City.	E. Bauer.	414 Washington st	210,000	100	1	none
SOLEDAD	Soledad Dis. Los An	George H. Russell.	636 Sacramento st	750,000	100	1										



## LOWER CALIFORNIA

## Colonization and Mining Company.

THE AGENTS SENT TO MEXICO BY the above Company having returned per steamer (ago) after having secured a tract of upwards of

**125,000 Acres**  
OF RICH AGRICULTURAL LAND,

and a valuable silver Mine,

the Company is now prepared to furnish exact information to Colonists who have already engaged, or those about to engage in this

## SPLENDID ENTERPRISE.

It proposes to send a vessel about the first of March, and there being but a limited number of shares NO TIME SHOULD BE LOST BY COLONISTS.

Farmers Miners and Mechanics,

with families are particularly invited by the authorities of the Territory. The land selected, in point of fertility of soil, is not excelled on the Continent. The climate is unsurpassed in the world. The richest Silver mines known to exist in the Territory are in the immediate vicinity and bordering on the agricultural lands of the Colony.

N. B. Bear in mind that a share costs, at present, only \$200, which entitles the holder to free transportation for self, family, and articles of personal use and an equal share in the land, the Company's Silver Mine, etc. A whole enterprise, being for the mutual benefit of all members only.

Full information can be had, and Mineral and Cotton specimens seen, by applying at the Office of the Company, North-west corner of Clay and Front Street.

## BOARD OF TRUSTEES.

A. G. RANDALL, President.

CARL JOHN H. HELL, V. President.

O. F. GEHRKE, Secretary.

Trustees.—L. F. LOVELAND, ISAAC FARO, M. D. MATHEWSON, H. C. PATRIDGE, I. ROWELL, M. D. Committee on Survey.—E. RICHARDS, Special Agent; J. R. C. ANDREWS, Surveyor.

## LEANDER RANSOM,

## Civil Engineer

AND

## SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

## STATE LOCATING AGENT.

And as such having the sale of

100,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

## HAYNES &amp; LAWTON,

IMPORTERS AND DEALERS IN

## CROCKERY,

GLASS WARE,

## FRENCH CHINA,

Coal Oil Lamps, Table Cutlery,

## CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSONE STREET,

[CORNER OF MERCHANT.]

uo16

SAN FRANCISCO.

## Attention! Attention!

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mound Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the centre of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency. The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,

No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office, no 13 6mo

## A. ROMAN &amp; Co.,

WHOLESALE AND RETAIL

Book Establishment,  
417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By J. mes Phillips and John Dartington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigment on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman. Gold Mining and Assaying; by Philips.

Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake. Ure's Dictionary of Arts, Manufactures and Mines.

Weissbach's Mechanics of Machinery and Engineering. Neville's Hydraulic Formula Tables. Fresenius' Chemical Analysis.

Together with many other works in this and similar lines

Books imported to order on short notice.

A. ROMAN & Co.

417 & 419 Montgomery Street.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences. [Evening Bulletin, Aug. 4.]

## THEN THIS!

## Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

## Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

## Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Stützpunkt der Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

## Gird's Budding Knife.

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentee,) San Francisco

sep1-3m

## The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities.

The spacious READING and EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

## News Stand,

AND A LARGE

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

## MUSIC! MUSIC!!

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments & Musical Merchandise

SHEET MUSIC & MUSICAL BOOKS.

GENUINE ROMAN STRINGS, &c.,

Light's New Patent Insulated Iron Frame is put into all of

LIGHTS & BRADBURY'S OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

Intone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

MELODEONS AND HARMONIUMS,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN,

Warranted superior to all others.

Send for a catalogue and Price list.

oct

A. KOHLER, Agent.

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as ASSISTANT MANAGER in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assessor of Copper Ore. He can give ample testimonials as to his capacity for the position he seeks.

Apply at this Office.

## W. T. &amp; J. GARRATT,

## City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and House Bells and Gongs, Hose and all other joints, Gaug cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garrett's Patent Improved Journal Metal.

## SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR

FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidesdorff street,

Opposite the What Cheer House, San Francisco.

LATEST IMPROVEMENT

in Ladies' Buckles.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERICK REICHEL, Manufacturing Jeweler,

620 Merchant street, San Francisco.

## GREAT REDUCTION

IN PRICES.

## STANFORD BROTHERS,

121, 123 and 125 California street,

Keep the Largest Stock of all Kinds of

## Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPEARM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

apl6tf

## 50 lbs. MARINE AND

## Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandelers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 35 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUE, Superintendent.

WORKS, North Beach; Office, 318 California st., San Francisco.

## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

## REMOVAL.

OFFICE OF THE PACIFIC METALurgical Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent, 318 California street, near Sansone, up stairs.



## SPECIAL NOTICES.

Office of the San Francisco Gold and Silver Mining Company, San Francisco, March 16, 1863. The Annual Meeting of the above named Company will be held at the Company's Office, No. 7 Montgomery Block, on Monday, April 6, at 1 o'clock, P. M.  
Mar. 16-td J. H. BLOOD, Secretary.

Office of the Tennessee Gold and Silver Mining Company, San Francisco, March, 16, 1863.—The Annual Meeting of the Stockholders of the above named Company will be held at the company's Office, No. 7, Montgomery Block, on Monday, April 6, 1863.  
mar16-td J. H. BLOOD, Secretary.

**MYERS & DAGGETT'S**  
**Mining and Stock Exchange,**  
No. 23½ B Street, Virginia City, N. T.

*Mining Stocks of All Kinds Bought & Sold.*

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* \* \* Abstracts of Titles Furnished, Etc.

**FREDERICK MANSELL,**  
**MECHANICAL & ARCHITECTURAL**  
**DRAUGHTSMAN,**

No. 422 California street, corner of Leidesdorf.

Drawings of MODELS made for parties for patents at Washington or London.  
mar23 2m

**Volcanic Smelting Furnace.**

PERSONS DESIRING INFORMATION AS TO THE USE of a d economical properties of this Furnace, and intending to make use of the same, when satisfied of its superiority over all other means of reducing ores and separating metals from the sulphurets, can obtain all needed explanation and advice in regard to the same, and the terms of sale of rights to use the same, on application Col J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietress through the Post Office of San Francisco. Drawings may be seen at the office of Col. J. D. Stevenson, No. 614 Merchant street, or at the office of T. Ogg Shaw, in Brannan's Building, Montgomery street.

The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all those portions of precious metals

which usually escape in a volatile form. The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of a capacity for smelting one ton of ore or more, on signing an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention for a longer period than two months.  
mch 16 MRS. E. J. HALL, M.D., Proprietress.

**New Style of Lady's Buckle.**

**W. BOHM, INVENTOR & PATENTEE**

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It exceeds all other buckles in

**Usefulness, Strength and Appearance.**

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of

BRABERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold will be guaranteed as to its Strength and Durability.  
W. BOHM, Patentee.

**JULIUS SILVERSMITH,**

**Commissioner for Nevada Territory,**

**OFFICE, IN LATE STATE CAPITOL,**

Corner of Battery & Washington streets.,  
Room 23, up stairs.

WE WOULD RESPECTFULLY SOLICIT FROM THOSE who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner, such as the drawing up of affidavits, acknowledgments, the taking testimony, etc.

**P. M. STEAMSHIP COMPANY.****NOTICE.**

Until further notice, the Steamers of Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above date's fall on Sunday, the steamer will be dispatched on the following Monday.  
A. B. FORBES, Agent.

**FULTON FOUNDRY & IRON WORKS**

**HINCKLEY & CO.,**

MANUFACTURERS OF

**Steam Engines,**

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,

**FIRST STREET,**

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* \* \* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.

PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**TO OWNERS OF WATER-POWER****Beth's Hydraulic Pressure Wheel.****THE SIMPLE, COMPACT, STRONG AND**

effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will

Save in Transportation Material and Labor, from

25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the

Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan19-1f

**Agency For Patents.**

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

**WETHERED & TIFFANY,**  
Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

**REAL ESTATE AGENT,**

No. 410 Montgomery street, San Francisco.

Real Estate Purchased and sold, and Loans Negotiated.

**WHEELER'S****Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
no16-1f ZENAS WHEELER.

**PEOPLE'S**  
**Steamship Line!**  
**CONNECTING**  
**CALIFORNIA AND NEW YORK,**  
**VIA NICARAGUA.**

**750 Miles Shorter than any other Route!**

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**

J. H. BLETHEN.....COMMANDER,

Will be dispatched for

**San Juan del Sur,**

From Mission street Wharf,

Punctually at 9 o'clock, A. M., on

**WEDNESDAY, - - - APRIL 22, 1863.**

Connecting at GREYTOWN with the Splendid Steamship

**ILLINOIS.....2500 Tons.**

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to

I. K. ROBERTS, Agent,

no 407 Washington Street, opp. Post Office.

**P. M. S. CO.**

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

On FRIDAY, April 3d.

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with

teampships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidesdorf sts.

**Miners' Foundry**  
**—AND—**  
**MACHINE WORKS,**

First St., between Howard & Folsom,  
SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* \* \* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING.

San Francisco, February 23, 1863.

**DONAHUE'S****Union Iron and Brass Foundry,**

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

**The First Established in the State.**

**MANUFACTURE STEAM ENGINES,**

**SAW AND GRIST MILL Machinery,** Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.  
PETER DONAHUE

**SQUARZA'S PUNCH.****HOME MANUFACTORY.**

WHOLESALE AND RETAIL,  
No. 44 Leidesdorf st., near Sacramento.  
Branch at 406 Montgomery street.  
my30

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19, First Street, San Francisco,  
Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

**To Quartz Miners.**

**Knox's Improved**  
**AMALGAMATING PAN,**  
WITH  
**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOM & CO.,

GOLDEN STATE IRON WORKS.

Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms, for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

**VULCAN IRON WORKS CO.**

P. TORQUET.....MANAGER.

R. IVERS. C. R. STEIGER. S. AITKEN.

**Steam Engine Builders,**

**Boiler Makers, Iron Founders and General Engineers,**

Nos. 137 & 139 FIRST STREET, - - - - SAN FRANCISCO.

STEAMBOAT MACHINERY built and repaired; also Saw, Flour and Quartz Mills, Pumping and Mining Machinery, etc., etc., etc.

Proprietors of Morse's Patent Fire Grates, JOURNAL, FOURNEYTON and other Turbine Water Wheels, with latest improvements.

**DEETKEN'S****Chemical and Metallurgical Works,**

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES. ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent. higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose.  
nov8-3m

**LEWIS COFFEY AND RISDON,****STEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

**JAMES PHELAN,**

(LATE J. & M. PHELAN.)

**IMPORTER AND JOBBER,****Wines, Liquors, Etc., Etc.,**

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited  
TERMS LIBERAL. Jan. 1-1f.

**THEODOR KALLENBERG****Maker of Models**

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Stet Stamps, Dies and Die Sinking, Engraving Stamps.

Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
n7-3m) San Francisco.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, APRIL 6, 1863.

NO. 23.

#### MORE ABOUT THE "KEITH PROCESS" FOR DESULPHURIZING ORES.

In a late issue of the Press we gave some account of a new process, for calcining or desulphurizing ores; with a promise to report further upon the matter whenever anything new came to hand. This process has been introduced at Blackhawk in the Pike's Peak mines and is known as the Keith process. We quote, as before, from the letter of a correspondent of the Territorial *Enterprise* :—

"The process is a more sensible plan of working than any I saw in the country. It may not be all its owners claim for it, but it is a move in the right direction, and with such improvements as may from time to time be suggested, will eventually be the mode used throughout the Colorado mines. As this process differs in some respects from those in use in Washoe, it will doubtless be interesting to our millmen to read a description of it. The ores of the country contain a very large amount of sulphur, and this has been a source of great trouble to millmen. It is apt to combine with the quicksilver, destroying its metallic character and causing it to granulate. This effect is more readily produced when warm water is used in the batteries, therefore only cold water is used. Some attempts were made a year or two ago to desulphurize the ores, but without much success. Not that the sulphur cannot as easily be burned out of their ores as out of our own, but the mode of operation was defective. They attempted to burn the sulphur out of the lumps of ore just as they came from the mine. This they tried to do by piling it up in kilns, built exactly like lime-kilns, and burning it as lime is burned. This only glazed the ore on the outside and melted the sulphur without dissipating it. On breaking open lumps of the ore, streaks of melted sulphur could be seen through the mass. Until lately no one thought of first crushing and then burning the ore as a means of getting rid of the sulphur. I do not doubt but that the reverberatory furnaces used in some of our Washoe reduction-works would effectually desulphurize any of the Pike's Peak ores. But Keith's plan differs greatly from ours, and may be much better and cheaper. I don't know that a written description can be understood, but I will make it as plain as possible. In describing the desulphurizing apparatus it will also be necessary to mention a new grinding mill, called by its inventor the 'Young America.' The reader is not to imagine a mill built (as they generally are in Washoe) with one floor some eight or ten feet above the other. On the upper floor stands a masticator (the same as those used on the Pacific coast), which breaks the ore into small pieces. The pieces pass from the masticator into theopper of the 'Young America' mill. Now for said mill :—

The mill is simply a hollow drum or wheel of cast iron about two feet and a half in diameter and six inches thick, setting up edgewise as a common grindstone stands when hung. But this is not hung and does not revolve, but is securely fastened in a frame. The crushing machinery is inside of the circular shell, and consists of nothing more than a number of fan-shaped arms which revolve with very great velocity. These arms are slightly curved and toward their points widen out till they are nearly as wide as the shell within which they revolve. That is all there is of the mill, velocity does the rest. The fans revolve with such tremendous velocity that all the ore coming into it is knocked into an impalpable powder. The immense velocity of these fans surprises the attraction of cohesion in the particles of ore, and they instantly surrender in the shape of the finest dust. Now, when I come to tell how the dust gets out of the mill I approach the desulphurizing apparatus. The fans of the mill, revolving as I have described them, of course, create a strong blast, like the blower of a foundry. This carries out the ore as fast as it becomes a powder—carries it out of the wheel, or mill,

and up a sheetiron tube about six inches in diameter (common stove-pipe,) to the furnace, some eight feet higher than the mill.

The furnace is a square brick structure, with a grate about three feet wide by four in length, and three feet high, in which a fire of common pine wood is built. The flame from this fire-place escapes into a chimney built in the shape of a muffle and, instead of rising upward, runs down toward the lower floors at an angle of forty-five degrees. The tube from the mill enters this muffle-shaped chimney at its upper end, just where the blaze from the furnace enters, and the strong current of air forced down it carries the flame through its whole length. It is claimed that much of the air forced into the chimney is consumed, as also all the sulphur contained in the ore, which in burning greatly intensifies the heat. There are several round holes, an inch or two in diameter, at intervals of three or four feet along both sides of the chimney. Through these, when the apparatus is in operation, a further supply of air than that furnished by the blower, is sucked in and assists in decomposing the sulphur contained in the ore. By the machinery above described, ore may be more quickly and perfectly burned than by any other plan I have ever seen.

In passing down the flue, or chimney, the pulverized ore is blown as dust through a jet of flame for a distance of about twenty feet—the length of the flue—and each particle being separate, is surrounded by air and a strong flame—in fact, is itself a red hot, blazing spark, with nothing resting upon it or confining it. It is in itself a miniature meteor, with plenty of room in which to give off its sulphur, arsenic and other volatile constituents. After passing down the flue, it falls into a receptacle of brick-work, whence it is raked out upon an earthen floor to cool. The ore now presents about the same appearance as that burned in a reverberatory furnace—a brick red. The amalgamating machinery is simply an arastra about eight feet in diameter, with a stone bottom and drag-stones. The sides or rim of this arastra is of copper plate.

Mr Keith claims that with this machinery he can extract one thousand dollars per cord from rock which heretofore, by the old process, has only yielded two hundred and fifty dollars per cord. The expense will be one hundred dollars per cord, leaving nine hundred dollars clear. [A cord of ore as measured in Pike's Peak, varies from 5 to 8 tons, according as the same may be heavy or light.] One-third of a cord of ore was tested by this new process, during my stay in Central City, and yielded at the rate of about eight hundred dollars per ton, where the old yield was thirty one dollars and twenty-five cents per ton. This was a most satisfactory result when we consider that it was the first attempt with the new apparatus. The mill men of Colorado have been sluicing twice as much gold into the ravines as they have saved. They have long known this, but they were all poor and afraid to venture upon any kind of experiments. Not a single man of capital has ever attempted the reduction of the ores of this country. All who have engaged in the business have been men of small means. Some of these have now become wealthy and are just beginning to think of improved machinery and processes."

There is much of novelty and perhaps of value, both in the crushing and desulphurizing process, as described above. The reduction apparatus, spoken of as the "Young America" mill is constructed much after the manner of Pond's crusher, which was illustrated in our issue of March 16th, and almost precisely like the "smut mills" used in the wheat growing states, at the East. The process for desulphurization is certainly very ingenious and quite new. If it will accomplish a tithe of what its projectors claim, it must prove of great value. The results given, as yet, appear to be but experiments. It stands the test of continual and

practical use it must, and will soon find its way into general use. We shall carefully watch for further results, and shall lay them before our readers as soon as obtained. The objections, spoken of in our first notice of this process, are not yet entirely removed from our mind. We trust, however, for the success of the general interest of quartz mining, that this process may accomplish all that is claimed for it.

#### THE MINERALOGY OF THE OVERLAND ROUTE.

We have heretofore given several interesting extracts from letters written by "Dan de Quille," to the Territorial *Enterprise*, during his late trip by the Overland stage-coach to the East. We now copy the following from his latest published letter :—

"The country shows nothing but sedimentary rocks from the Webber to the Black Hills. Coal is found cropping out on Green river, on Bitter Creek, and in several other places on the route. On the Yellow Creek hills, which we get into soon after leaving Echo Cañon, we found our road obliterated by the snow having drifted over it, but we had a strong team of six mules, and passed over the range without difficulty or delay. The Bitter Creek country is the most barren, bleak and dreary on the whole route. It is really a bitter looking region, and bitter must be the lot of those whose fate it is to keep the stations of the Overland Company in this desolate place.

A COAL OIL might be had here with very little trouble. It drips out of the rocks in one place along a ravine. At one of the stations they told me that they sometimes dug out this rock and used it for fuel. They supposed it to be some kind of coal, yet were puzzled to know what to make of the stuff, as it was not the color of coal and presented much the appearance of any other shelly rock. It was in no wise reduced in bulk by burning, and after the grease stopped stewing out of it, it would go out entirely. Their coal was simply slaty rock completely saturated with coal oil. Were this in Nevada Territory or California, it would be a fortune worth securing, and it may be of value, situated as it is, in Bitter Creek Valley.

SILVER INDICATIONS.—We passed through the greater part of the Black Hills in the night, and had little chance of examining their formation; but when we first entered them I noticed several quartz veins crossing the road. These had more the appearance of being silver-bearing than auriferous, and resembled some of the ores of Palmyra District, Nevada Territory. Judging by what I saw of the country, I should say that paying mines exist in these mountains, at least on their western slope.

THE NORTH PACIFIC REVIEW for April has been laid on our table, and contains a variety of attractive reading matter. The present number is embellished with a spirited and life like lithograph of Gen. Joseph Hooker. Mr. W. Warren, Esq., retires from the editorial chair, and the Magazine will hereafter be conducted by Messrs. Dalgliesh & Co.

THE CALIFORNIA NAUTICAL MAGAZINE for April has a good table of contents, chiefly adapted to its own peculiar sphere.

ANOTHER MONSTER DIAMOND.—Late Havre papers speak of a diamond recently found by a negro in Brazil, far exceeding in dimensions the famous Koh-i-noor: They say that Sambo intends to appropriate the proceeds, to the establishment of a settlement for free blacks.



## GOLD MINING IN WALES, (ENG.)—NEW MINING MACHINERY.

The returns of the British mines for 1861 contain the first actual report of gold produced from a mine in England. This gold was taken from a quartz lode in Dollely, Merionethshire. The natural consequence of this discovery was the formation of numerous companies to work other lodes of a similar character in North Wales, in the progress of which considerable interest is felt among British mining circles.

We learn by a paragraph in the London *Mining Journal* of Jan. 20th, that these companies have met with similar troubles with regard to the saving of the mineral which was, and still is encountered by the gold miners of California. A correspondent of the *Journal* says that "Several modes of extraction have been experimented upon, and have generally, if not totally failed. The last attempt was to be perfect; there was to be no mistake about it; but the result of that, again, was that about 17 ounces of gold, per ton, was extracted from the tailings." Here, we appear to have the early days of California repeated in the ancient mining region of Wales. At present, it is said that but two gold mines, there, are making regular returns. Quite a discussion has also been going on as to the relative merits of the ordinary Stamps and "Berdan's Crusher," for reducing the rock. Berdan's machine seems to have the inside track. In alluding to different operators, the correspondent of the *Journal* says:—

"John Perry has an average yield of about 7 ozs. of gold per ton from the Vigna and Clagan; and old Owen Evans gets a constant yield of 4 to 5 ozs. per ton in the Welsh Gold Mining Co's mine, at Ceinced. The last named person is a most unassuming man, but he has given years of study and nights of anxiety to the gold question, and he firmly believes he has mastered it.

From want of the aid which a really practical worker could render, most substantial buildings have been erected, water-wheels and steam engines ditto, stamps and crushers attached, amalgamating machines, in barrels, pans, troughs, etc., and a rivulet of mercury has run to waste, in fruitless attempts to catch the gold; men as able and as keen as the late Sir Robert Peel, have had to do with these works as shareholders and managers, they have brought to bear upon the subject a vast amount of skill, experience, industry and capital. Their only failure was, they did not, as we may say, "chalk their bobbins."

There is another veteran in the gold business in Dollely; I allude to Robert M. Roberts, who was connected with the late Mr. Harvey in all his gold researches. The person I have named will tell you that in the Merionethshire quartz, there is a substance difficult to overcome at first, and the presence of that substance is the cause of a large amount of failures. To overcome it is as easy as to 'chalk your bobbins.' They have overcome it, and have extracted gold from all quartz in which it was contained. If any director, shareholder or manager of gold mines should be embarrassed, or wish instruction, I would recommend to consult Perry, Evans or Roberts on the subject of gold quartz. I am glad to say they are called upon sometimes to give an opinion. In Dollely these opinions are safe to follow. It is not the purpose of this communication to ignore any of the efforts of the eminent men, gentlemen of very great attainments, who are engaged in solving the problem of extracting gold, profitably, in Wales."

An old Californian, well known as a former resident of this city, and once extensively engaged in mining enterprises on this coast, is also operating largely among the new found English gold mines. He is noticed as follows, in the same communication from which we make the above extracts:—

"I would also add that Mr. Mosheimer has the charge of erecting an extensive series of machinery in three or four different mines. I have seen the castings of 'Mosheimer's Patent,' and from the well known ingenuity and experience of this gentleman, down to 'chalk your bobbins,' I firmly believe he will overcome every obstacle, and that his reduction-works will be an honor to himself, and a profit to his friends."

From the last paragraph it will be observed that Mr. Mosheimer has devised a new class of machinery for the reduction of quartz and the extraction of the mineral therefrom. From letters received in this city, we understand that Mr. M. crushes the quartz dry; that he has secured letters patent for the same in England, and taken the necessary steps to do the same in this country. We shall probably soon be able to give an illustrated description of this machinery in the MINING AND SCIENTIFIC PRESS.

COAL has been discovered about 70 miles east of Star city, Humboldt, and parties are now engaged in examining the locality, with the view of learning its capacity and value as a fuel and practicability for working.

## INVESTMENTS IN THE INTERIOR.—HOPEFUL PROSPECTS.

It is a significant and most important fact that an excess of about \$10,000,000 in coin has been sent into the interior over, and above coin remittances from that direction during the past year. The necessary deductions from this fact are that this balance has been absorbed, within the period referred to in the operations of internal commerce, in the expansion of agriculture, the opening and working of the mines, the building up of manufacturing establishments, and such other uses as are incident to the thrift and enterprise of an industrious and prosperous people.

The rapidly increasing area of our mineral developments, and the new and improved methods now being introduced for the reduction of ores and the extraction of minerals therefrom, together with the rapid formation of new companies for prospecting and working, imparts to this leading interest of industry a degree of excitement and energy rarely witnessed in any industrial pursuit.

With the incoming of the year we have witnessed the springing up of an entirely new branch of mining industry, and one which bids fair to rival in extent and importance either silver or gold. The existence of a copper belt inexhaustible in its yields, and extending throughout the entire length of the State, is now a universally acknowledged fact. The bearing which this new development is destined to exert upon the future growth and prosperity of the State is, just now, a theme of most hopeful and animated discussion.

The copious rains, with which we have recently been visited, have set to rest all apprehensions with regard to short crops in our agricultural districts, while the large accumulations of snow upon the mountains assure the miner that his summer supply of water will be fully equal to the ordinary amount. The failure of the usual supply of water to the miner, in the early part of the season has been more than compensated, in the increased facility such lack of rain has given to prospectors and operators in auriferous quartz and copper. With the success of all other branches of industry our mercantile classes have the fullest assurance of an abundant demand for every description of merchandise suitable to the California trade.

A WEATHER PROPHECY.—George Shepherd, Civil Engineer, is furnishing the London *Mining Journal*, with weekly predictions of the state of the weather, etc. founded on philosophical and scientific calculations, which are attracting considerable attention. In his letter of Jan. 20, 1863, he says:

"I regret that my absence from London on professional business, prevented me from foretelling the approach of the late severe gales, which caused such havoc on our coasts."

With regard to looming events; strong winds will occur about the 28th inst., also about Feb. 3d. I have already foretold we shall have an early spring; we shall also have a fine summer and autumn, and weather all that could be desired for the next harvest. But the year 1864, I again repeat, will bring sorrow, perplexity and trouble on the English nation generally. [Perhaps the prophet sees "English Intervention," in American affairs coming up in the early future—Ed. PRESS.] There cannot be a doubt but that our winters are gradually improving. How long it will continue to be so we must leave to the wise Dispenser of all things. To all appearances another comet is approaching the sun, and will be discovered very shortly. This, however, I leave to our astronomers, who have more time to search the heavens than I have. I wish I had more leisure for this interesting subject."

HOW TO TELL THE VALUE OF GREENBACKS.—Many persons find it difficult to compute the value of paper money when gold commands a premium. A simple and invariable rule to arrive at the value of paper money when gold commands a certain premium is to multiply 100 by the amount of the premium on gold and divide the product by 100 with the amount of premium added; the result shows the exact amount of the discount on paper money. For example: Say gold is quoted at 60 cents premium in New York; multiply 100 by 60 and the product is 6,000; divide this by 160 and the result is 37½, which is the exact discount on the paper money, and shows that when gold commands a premium of 60 cents on the dollar paper money is worth 62½ cents on the dollar.

FROM HUMBOLDT.—We received a call, on Saturday, from William Holcomb, Esq., of Humboldt, N. T. Mr. H. left upon our table specimens from several of the principal leads in the Buena Vista District; among them we notice the Schuykill, Sargent, Camelion, Comet Corner, and Mars. The former is an exceedingly rich lode, and the specimen before us, which has been subjected to the action of fire is completely coated with silver, that has been brought out by the heat. The claims above enumerated are all considered very valuable, and measures are being taken to have them thoroughly developed. The specimens before us are unlike those usually found about Virginia City. They consist, so far as we can judge by the eye, chiefly of Horn Silver, which is usually considered very valuable as a silver ore, and is easily worked. They present the usual shades of this ore from green to a yellowish brown and dark blue, and are evidently very rich. We notice very little appearance of sulphurets, except in one from the "magna charta," a lead in Santa Clara District. These specimens may now be seen at W. P. Denckla & Co., No. 508 Montgomery St.

MINING IN AUSTRIA.—The Austrian Government is among the most liberal of the European Powers, in its encouragement of mining enterprise. The country possesses a large variety of minerals, from gold and the other precious metals, down (or rather up) to iron, and coal. Large numbers of foreigners, (especially Englishmen) are engaged in mining in that country, and extensive developments have already been made; yet there is a vast extent of mining territory still undeveloped. The Government gives to those desirous to engage in mining, important facilities, and "concessions" or permits to mine, cost but a trifle compared to similar requirements in other European countries. In England, a man who desires to embark in gold mining, must first pay down a fee of about \$25, and then pay over to the Government one twelfth of all the gold produced. This rule, we believe, also holds good in mining for other minerals. In Austria, a man pays \$5 for his "concession," and but one fifth of the net, instead of the gross produce, as in England.

## Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - Proprietors

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals, &c. Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insure them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, to become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. I do not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.



## SAN FRANCISCO MINING NOTICES.

## ASSESSMENTS LEVIED.

Assessments upon Mining Stocks have been levied as follows:—

Garibaldi.—Assessment of \$1 per share, levied March 2nd.

Sutro.—Assessment of \$1 per share, levied Feb. 23, payable March 23.

Silver Quartz Mill Co.—Assessment of 5 per cent. levied Feb. 23, payable March 28.

Helvetia.—Assessment of 25 cts. per share, levied Feb. 17, payable March 10.

Zouave.—Assessment of \$1 levied Feb. 22, payable Mar. 21.

Rogers.—Assessment of \$5 per share levied Feb. 4, payable Mar. 15.

Sam Wright.—Assessment of 50 cts. per share levied Mar. 2, payable immediately, delinquents to be sold Apr. 2.

Napoleon (copper).—Assessments of \$3 per share levied Mar. 3, payable in 30 days.

Golden Age.—Assessment of one dollar per share levied Feb. 24, payable March 26.

Washoe Gold & Silver.—An assessment of 2 per cent. on capital stock was levied Feb. 16, payable Apr. 1.

Rhodes' Diggings.—Assessment of 25 cts. per share levied Feb. 26, payable Mar. 5.

Texas Co., at a Meeting held Feb. 14, levied an assessment of one dollar per share, payable to the Secretary in Virginia City.

Santa Rosa Co.—February assessment of 20 cents per share now due and payable.

Madison Co.—An assessment, two dollars per share, was levied Feb. 17, payable immediately, at Office, 600 Merchant St.

Union Co.—An assessment of one dollar per share was levied February 16, payable on or before March 25.

Penn Co.—An assessment of \$3 per share was levied Feb. 5, one half payable March 1, balance April 15.

Kossuth Co., Devil's Gate District.—An assessment of 10 cts. per share was levied Feb. 7.

Constitution Company levied an assessment of 25 cts. per Feb. 11, payable immediately.

La Plata Oro Co. levied an assessment of five dollars per share, Feb. 9, payable at Office of the Secretary in Virginia City.

La Plata Co. levied an assessment of 50 cts. per share Feb. 2nd, payable at Office of the President.

Alamo Co. levied an assessment of 50 cts. per share, Feb. 11, payable on or before March 20, at 115 Cal. Street San Francisco, or at office in Carson City.

Tucker Co. levied an assessment of 25 cts. per share, Feb. 11, payable immediately at 608 Merchant St.

Hawley Co. levied an assessment of one dollar per share, on Feb. 9, payable on or before March 12, to Superintendent at the mine, or Secretary at Office.

Slate Range Co. levied an assessment of 50 cts. per share, Feb. 4, payable, March 15.

Moss G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., or to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 75 cents per share, Jan. 27, payable to the Secretary, at 428, Montgomery St.

El Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to the Supt.

Gaudaloupe S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or to the Superintendent at the mine in Aurora, (Esmeralda.)

Dios Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cents per share was levied Jan. 24, payable immediately.

Sonora Mining Co.—An assessment of 25 cents per share was levied, Jan 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable within ten days.

Chs. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount Davidson Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Airatic.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Norcross.—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skae, at the Mine, on or before Feb. 25.

Mina Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

Recorder Mining Co.—An Assessment of One Dollar per foot was levied Jan. 19, payable half on or before Feb. 18, and balance on or before March 20.

Hale & Norcross S. M. Co. have levied an assessment of \$5 per share payable on or before Jan. 26th.

Martin White.—An assessment of 20 cts. a share was levied, Jan. 2.

Oriental G. & S. M. Co.—An assessment of 50 cts. per share was levied, Jan. 14, payable at Office, cor. Sutton Avenue and C St., Virginia City.

Baltimore America Consolidated.—An assessment of 50 cents per share was levied, Jan. 5.

Savage.—An assessment of \$35 cents per share was levied, Jan. 7.

Hawley.—An assessment of \$1.00 per share was levied Feb. 9, payable March 12.

Cole S. M. Co.—An assessment of One Dollar per share was levied, Jan. 10, payable, Feb. 1.

United States M. Co.—An assessment of six and two-thirds cts. per share was levied Jan. 10, 1863, payable to the Superintendent at the mine, or to the Secretary, Rooms 7 and 8, Government House, San Francisco.

Sierra Nevada S. M. Co. levied an assessment of \$15 per share, Jan. 15—payable Feb. 18.

Lady Bryan.—An assessment of 70 cts. was levied, Jan. 13, payable on or before Feb. 16.

Ida G. & S. Co. (Russ District)—An assessment of \$1 was levied, Jan. 14.

## ASSESSMENT SALES.

Sales of Stock for non-payment of assessments are advertised to be sold as follows:—

Oriental Tunnel Co. will sell, on Saturday, Mar. 28.

Mars will institute proceedings against delinquents, Mar. 16th.

Planet will institute proceedings against delinquents Mar. 16th.

Moray Co. (V. City.—Suits for delinquent assessments will be commenced, March 14.

Michigan Co. (Gold Hill) will commence suits for delinquent assessments, March 16.

Lady Bryan G. & S. M. Co.—Shares of delinquent stockholders will be sold at auction for assessments, at No. 400, Montgomery street, on Jan. 27.

## GENERAL NOTICES.

Yellow Jacket.—Corporate Deed now ready for signature at office of H. G. Maynard, Gold Hill, N. T.

Jenny Lind (Esmeralda).—Owners of ground in this Cot are requestes to call and sign deed of trust at 608 Merchans St.

Mount Hope Co.—Persons claiming stock are requested to present title papers for examination till March 16.

U. S. Mining Co.—All persons claiming stock are requested to present title papers for examination at Nos. 7 & 8 Government House.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

THE SWEETZ, Co., Gold Hill, give notice that Baltic

Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Bach & Paxton Companies that they are trespassing upon the Chimney Rock Co's ground.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefitted by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers:—Four Dollars per annum.

## Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80

Names can be sent in at different times and from different Post-offices

Specimen copies will be sent gratis to any part of the country.

## EWER &amp; SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Paterson streets, San Francisco.

**DR. VAN ZANDT,**  
Consulting Physician and Surgeon.  
OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity Made Subservient for the Cure of all Nervous and Spinal Diseases

**THAT THIS PRINCIPLE**, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanting by physicians to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

## Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting, and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

## Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influence upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

C. W. THOMAS, Plaining Mill, California street, facing the Mission R. R. Depot. San Francisco.

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., Importers of Wines and Liquors, S. E. cor. Front and Sacramento sts.

D. R. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner.

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T.

PALMER, HANSCOM & Co. Golden State Foundry and Machine Works (Formerly Sutter Iron Works.) First street near Market.



## MINING--BOGUS AND BONAFIDE.

Investments in mining properly are not necessarily so hazardous as most people imagine. In opening up new mineral regions, and in entering extensively upon fresh adventures in old mineral fields, speculation will unavoidably creep in, to a greater or less extent. It is well, perhaps, that it does so. Man is naturally indolent, and unless the imagination is brought into pretty active play, as a stimulus, it is seldom that he accomplishes much. This confession may be somewhat humiliating, but it is nevertheless true. Speculation—the desperate chances of large possible gain, combined with a natural desire for adventure, will often lead men of means to invest in mining operations, when all the calm matter-of-fact reasoning of the over cautious, will utterly fail to induce them to invest a dime. It is by such stimulus that almost all important mineral developments are brought out; developments, which, if left to the ordinary routine of business, would have continued hidden away in the secret recesses of the earth, for years and perhaps for centuries. So far, speculation is legitimate, and beneficial in enlarging the domain of industry. Individual losses may occur—they must, as an inevitable consequence; but the community is benefited, labor is provided for, commerce finds new channels, and the car of progress receives a renewed impulse in its onward course.

Here speculation, *per se*, ceases to be useful, and should blend in productiveness, by lending its aid to the actual development of such mines as promise a real value; while all others should be ignored. If the speculative world would be guided by such a course of operations, the public at large would not have so unfavorable an opinion of this class of mining as is now generally entertained. That it is not so directed at all times is a lamentable fact; but one for which the complaining public is quite as much to blame as the speculators themselves, as will hereinafter appear.

Speculative mining is confined chiefly to great commercial centres, where capital aggregates. That class of mining leads, in this State, may be found in greatest abundance on Montgomery street, in this city. The radiating point of these leads appears to be located somewhere between Washington and Merchant street. They "crop out" at intervals all along the first named thoroughfare. Their "indications" are distinct and unmistakable to the intelligent observer. The managers of this peculiar class of mines are usually denominated "brokers." Now brokers are a very useful and almost indispensable class of operators in all large centres of business. The community could not well do without them. Those of whom we are now writing may be divided into two classes—the *mining* broker, and the *market* broker. Both, we assume and hold to be honest. The former is the one who calculates the merits or demerits of a mine independent of the market. The latter is one who studies the market independent of the value or prospects of the mine.

Now, if "operating" in these mines were confined exclusively to the brokers themselves, and on their own account, it is evident that but little progress would be made in advancing their shares. Of course the chief business of the broker is to buy and sell for his client. Now it lies altogether with the client which class of brokers he shall employ. If his object is a legitimate operation, he will employ the one who prefers to operate on the actual merits of the mine. If otherwise, he seeks out the less conscientious agent who goes upon the street to "bull" and "bear" as the case may be, and put money in his own and his client's pocket, no matter at what sacrifice of principle. Such transactions are but little better, in their moral aspect, than the act of getting up a purely bogus mine, and selling in the market that which does not and cannot have a value. This class of operations are detrimental, in the highest degree, to all legitimate mining, and should be frowned upon by the entire community. The wrong in the case is usually attributable to the outside party, who if unsuccessful, is generally the first to complain of mining speculation. "Bulls" and "bears" are, however, sometimes serviceable, if they do not carry on their operations too steep. They are often the life of the market, and serve as the needed stimulus to action, not unfrequently being the immediate means, of bringing to life and activity mines of actual merit, which might otherwise have been allowed, perhaps for ages, to slumber in inaction.

## THE MINING MARKET.

The condition of the mining market, at the present time, is considered by many as somewhat ominous. Some confidently predict "a crash ahead," with "loss and suffering in store"—"a revulsion which will prove temporarily ruinous to our prosperity." We are not of those who adopt extreme views on either side. While we admit that an undue state of excitement exists in the community we still have no fear of any serious depression—anything at all commensurate with the present buoyancy of stocks. There may indeed be such an over eagerness to invest as to give opportunity for the introduction of purely speculative or absolutely bogus mines, but such cases will be rare indeed. Our field for mining operations is too wide, too rich and too varied to make such operations productive, to any extent. It actually requires less labor, and less financiering to hunt up, and place in the market genuine operations with fair prospects of success, than it does to resort to a purely fictitious basis. To say nothing of the splendid results already realized from numerous first class mines, there are even now so many, which were at first regarded as little better than "wild cat," which are now turning out better than was anticipated, that even the most cautious, are beginning to admit that we have too real and solid a basis, to be seriously affected by any number of unproductive adventures which present indications may warrant us to anticipate. The times however are somewhat propitious for inflated temporary operations, and it would be well for our citizens to act with more caution than heretofore in making investments. They should enquire more carefully into the merits and demerits of the mines in which they would invest, and exercise greater caution in the selection of agents, making careful enquiry as to their facilities and inclination to act as *mining* or *market* brokers. The same caution should be observed in the organization of companies, eschewing all operations not founded upon, at least, a fairly promising basis.

Mines under *bona fide* management, in good districts, with fair indications for future improvement and progress, must surely be worth investing in. *Progressive* mines are ever the most productive of wealth. It is this class of mines, almost exclusively, which, to-day, having only a nominal value of a few shillings or a few dollars a foot, tomorrow advance to a comparatively high figure, by some fortunate development, thus doubling, trebling or increasing ten or a hundred fold in a single day, the amount invested. The effect of an advance in one such, it will be readily seen, may more than compensate for a total loss in a great number of others. If you invest \$5 per in ten different companies, and only one of these goes up to \$100 per foot, you have doubled your entire investment, and have your chances still left in the other nine. The Mining List which we publish on the 6th page of this paper, exclusive of those of known and acknowledged value, reaches nearly 200 in number; we will call it just that number. As *progressive* mines, occupying a fair position as legitimate adventures, \$5 per foot, of assessments, ought to pretty definitely determine whether they possess sufficient value for legitimate and extensive mining operations. Now if only 20 of the 200 prove reliable, and advance to a value of \$200 per foot, the total amount of investment will be doubled. If two or three of the number should reach the standard of "first class," the proportionate increased value of the investment would be vastly increased. Now can any person with a knowledge of the brilliant successes and minor, yet important developments already made, entertain for a moment the idea that the list we give will ever be cut down to only 20 productive mines? Yet ten only, would save us from actual loss!

As that list now stands, either the Ophir or Gould & Curry, alone, is worth more money than the entire amount which has, up to this date, been expended on all the mines which appear in our list; and were every other mine on the list to prove a failure, except the two last mentioned, the community, as a whole would be a gainer in wealth. Inconsiderate speculation may be carried to an extent which will work a limited injury to a few individuals; but it is idle and preposterous to talk about anything like a general collapse in the incorporated mining interests of the State.

Efforts are being made in Australia to acclimatise in that region English swans, hares, pigeons, grouse, etc.

## WORDS OF ENCOURAGEMENT.

It is contrary to our usual custom to copy commendatory notices from our brethren of the Press, or to publish extracts from the numerous letters we receive, whose writers are so kind or so partial as to make especial and favorable mention of our efforts to furnish a paper which shall meet the wants of the mining public. Our course, in this respect, perhaps, is not so much the result of our innate modesty, as the consciousness that, notwithstanding the partiality of our correspondants, we really think the Press is yet far short of what such a paper should be. Although our circulation and other patronage is constantly increasing, it has not yet arrived at a point which will enable us to devote that time and money requisite to produce paper which shall properly represent the great and important mining interest of the Pacific coast. Our sheet is too small and the amount of matter to which we are limited, is quite too little to give the paper that variety and comprehensiveness, which the importance of the interest we represent demands. We hope, however, in a short time to be able, from the increase of our circulation and general business to do ourselves justice and to furnish our readers with a journal, which shall fully merit the good opinion which they have so generally expressed with regard to our efforts. We would take this occasion to express our thanks to those who have interested themselves in extending the circulation of the Press, both in this city, and throughout the State and adjoining Territories. We append extracts of several letters, which, with others, we have received during a single week, to the writers of which we are entire strangers:—

A subscriber near Carson City writes:—"In conclusion permit me to remark how well the mining interest of California and Nevada is now represented by your paper, and that I hope it will soon be the means of communication and interchange of opinion between members of the mining profession. Individual experience is always more or less limited; but if each mill-man or miner would but make known the results of this experience, a mass of information would be obtained, of the utmost value to all."

An enquiring correspondent from a small Mining Camp in Amador Co., writes:—"I have seen repeated notices of your publication, in the newspapers, but have never met with a number of it. It is doubtless such a paper as we miners need. Will you therefore be kind enough to send me a few numbers of it, in order that we may learn something about its character, terms, &c.?" [The papers have been duly forwarded as per request.]

A gentleman in Aurora (Esmeralda) where we already had a very good circulation, writes as follows:—

"MESSRS EWER AND SMITH:—I happened to see a copy of the MINING AND SCIENTIFIC PRESS a day or two since, and concluded to send and subscribe for it. But thought I would try to get a few names to join to my own for the sake of convenience in sending. The result was that a trial of an hour or two succeeded in getting 21 names, the money for which I herewith remit by check on W., F. & Co.

I hope to add yet more names to the list in a few days. I like the paper and wish to encourage it."

THE LOS ANGELES MINES.—The papers of Los Angeles are giving encouraging accounts of the mines in that county. They are going ahead rapidly in the Soledad district. Fine gray sulphuret of copper has been struck in the Mars shaft at a depth of 45 feet. The Santa Clara Company have found rich gold quartz on the Eureka lode. The Los Angeles Consolidated Mining Company, having completed the assessments on their fifteen lodes, will soon be ready for a most thorough work. They are now sinking upon the Eureka, first South Extension. It is expected that they will reach the main vein in a few weeks. The outcroppings and float rock in the extension above named, assay equal to the rock taken from the discovery claim.

THE HUMBOLDT MINES.—The success of the mining interest of the Humboldt district, exceeds the expectations of the most sanguine. We look for important developments from this region during the coming summer. Besides gold and silver, there has been found in this district, coal, salt, saltpeter, cement, cinnebar, and a species of building rock said to be superior to anything on the continent, in quality and the facilities of quarrying and preparing it for use.



## THE IMPERIAL SILVER MINING COMPANY OF WASHOE.

This company, which has now been placed in the first rank of dividend paying companies, has recently been formed by a consolidation of the Washoe Gold and Silver Mining Co., No. 1; the Holmes Co., and the Alta Company. The Company, as now organized holds 183½ feet of ground on Gold Hill and owns the Rock Point Mills, which cost \$250,000 and the Nevada Mills, which cost \$150,000. The capital stock consists of \$1,000,000, divided into 2,000 shares at \$500 each. No assessments have ever been called for. The entire expense of opening the mine and constructing the mills, etc., has been drawn from the mine itself, as in the case of the Ophir. The dividend which was declared, a few days since, 2½ per cent. for one and a-half months, on the capital stock, is equivalent to a monthly dividend of \$100 per foot. This dividend was independent of a reserve of \$10,000 toward a contingent fund. The company commenced crushing on the 15th of February last. Samuel Merritt, M. D., is President of the Company and C. T. Hopkins, Secretary. Office at 405 Front street.

**VIRGINIA AND TRUCKEE RAILROAD.**—A bill creating the "Virginia City and Truckee Railroad Company, with a branch to Carson," was passed at the late session of the Nevada Legislature. John H. Atchinson, Gov. Johnson, Theodore Winters, and other substantial citizens are among the incorporators. John F. Kidder, engineer of the road, is in Virginia City, and will immediately begin a preliminary survey of the line.

## GENERAL MINING STOCK REPORT.

## REPORT OF SALES

At the San Francisco Mining Stock Board,  
For the week ending April 4th, 1883.

Names of Companies.	Total No. Shrs.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2500	—	2500	2440	—	2400
Gould & Curry	4,800	4	500	3175	3000	—	3050	3100	3200
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	6,000	4	500	—	410	425	300	350	425
Potosi	2,800	2	400	330	365	370	325	400	—
Hale & Norcross	8,000	2	500	780	775	800	800	800	—
Sierra Nevada	3,000	1	300	75	—	62½	—	50	—
Danay	8,000	4	500	—	—	—	—	—	63
Burning Moscow	4,800	2	100	122½	120	105	130	121	131
North Potosi	2,000	1	300	26	27½	30	—	—	—
Rogers, F. D.	3,000	1	250	—	15	—	—	15	13½
Meredith	7,200	2	125	45	45	—	—	45	—
Charles Caney	1,800	1	30	—	—	70	75	76	—
Sacramento	1,800	1	500	60	45	50	—	—	46
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	6,000	1	100	—	—	—	—	—	—
Savage	800	1	—	1350	1325	1300	1100	1050	1300
Iowa	—	1	—	1350	—	—	—	—	—
El Dorado	—	1	—	55	57½	55	60	50	—
Norton	1,800	1	—	16	19	—	18	18	—
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	40	41½	37½	39	37½	37
Adriatic	—	—	—	9½	9½	8	8½	7	—
Cedar Hill Tunnel	—	—	—	6	—	—	6	—	—
Mount Davidson	10,000	3	200	630	7	—	6½	5	6
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	4	60	380	420	403	410	400	—
Antelope	1,200	1	500	—	310	315	316	355	362
Esmeralda	1,000	1	1000	35	35	35	40	40	—
Real Del Monte	4,400	1	400	—	100	100	120	130	160
Utah	1,200	1	100	—	—	—	5	5	—
Silver Hill	3,000	1	—	81	98	100	97½	90	95
Nevada	—	—	—	16	16	15	17	16	16
<b>COSO STOCKS.</b>									
Josephine	—	—	—	22½	23	24	23	25	27½
Coso	—	—	—	16½	15	15	—	—	15
Willow Springs	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	—	—	—	—	—	—	—	—	—
Dios Padre	—	—	—	55	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	—	—	—	19	20	22½	24	—	—
California	—	—	—	—	—	—	—	—	—
Laurel Hill	—	—	—	6	5	5	6	—	—
Utica	—	—	—	—	—	—	—	140	—

## REMARKS.

The business of the week has been unusually active and large. The amount of transactions have exceeded \$400,000, and embrace a very extensive range of stocks. First class shares have come in for a larger share of attention than for several weeks previous. The usual fluctuations have been noticed.

Ophir, which opened at \$2500, gradually declined to \$2430 and 2400. The purchase account of the Old Virginia claim closes with the present month, and the former dividend of \$72 per foot may be hereafter expected, which will doubtless have a favorable influence upon the stock.

Savage has still further advanced under encouraging advices from the mine. 46 shares changed hands at \$1400 b. 60 bs.

Chollar has declined slightly, in prospect of heavy assessments to meet costs of recent litigation and the expenses.  
Burning Moscow has experienced considerable fluctuation and closed the week at a slight decline.

Lady Bryan has also suffered much fluctuation; commencing the week at \$22, it declined to \$13, subsequently, and closed at \$20 b. 30 ds.

Wide West after experiencing considerable fluctuation closed the week at considerable advance. Antelope also advanced about \$60.

We subjoin our usual record of transactions:

## TRANSACTIONS IN SHARES, FOR THE WEEK.

## NEVADA STOCKS.

Ophir—72 at \$2500; 48 at 2450; 12 at 2440; 12 at 2435  
Potosi—50 at \$400.  
Chollar—60 at \$475, br 30 ds.; 20 at 470, br 30 ds.; 80 at 435; 80 at 460, br 30 ds.; 20 at 425.  
Chs. Caney—2 at \$70; 5 at 77½.  
Burning Moscow—20 at \$130, br 30 ds.; 58 at 120; 50 at 122½; 80 at 125; 864 from 100 @ 140.  
Cole—20 at \$16.  
Lady Bryan—35 at \$15; 100 at 20, br 30 ds.; 50 at 12; 333 from 13 @ 20.  
Adriatic—60 at \$10—15 at 8—15 at 9½; 18½ at 9.  
Burnside—15 at \$40; 13 at 41; 10 a 30; 22 at 39; 20 from 39 to 39½.  
Nevada—21 at \$15; 25 at 17; 10 at 16; 20 at 15½.  
Savage—10 at \$1300, b. 30 ds.; 2 at 1400 b. 60 ds.; 5 at 1390, b. 10 10 ds; 10 at 1380, br 10 ds.  
Desert—80 at \$9; 25 at 6½; 25 at 7; 62 at 6.  
Laurel Hill—70 at \$6.  
Reese River—172 at \$6; 562 at 6½; 540 at 7; 10 at 64.  
Meredith—40 at \$45. Iowa 8 at \$100.  
South Burnside—10 at \$9. Mount Davidson—10 at 7.  
Forth Potosi—5 at 30. Cedar Hill Tunnel—10 at 6.  
Sierra Nevada—10 at 75. Sacramento—5 at 60.  
Iowa—8 at 100. Norton 25 at 20; 25 at 19.  
Annie Laurie—200 at \$1.  
Zouave—10 at \$16. Ragged Pat—100 at \$1.  
Golden Cross—10 at \$15. St. Louis—160 at \$2. br 30 ds  
Rose, (Humboldt) 25 at \$100. Hale & Norcross, 20 at 800

## ESMERALDA STOCKS.

Wide West—3 at \$370; 5 at 380; 7 at 420; 5 at 395; 10 at 400; 51 at 415; 10 at 410; 5 at 412; 20 at 430, br 45 ds.  
Antelope—15 at \$310; 4 at 306; 10 at 380; 10 at 320, s. 30 ds.; 10 at 325, s. 30 ds.; 5 at 350, br. 30 ds.; 5 at 350; 15 from 333 to 355.  
Silver Hill—20 at \$55, br 30 ds. Gov. Nye, 65 at 9½.  
Bamboo—5 at 43; 10 at 50, br. 30 ds.  
Utah—10 at 97½; 40 at 95.  
Pond—2 at \$110.  
Esmeralda—13 at 50. Coso—16 at 20.

## COSO STOCKS.

Josephine—3 at \$22½; 25 at 23; 16 at 24; 10 at 25½; 10 at 27; 10 at 27½.  
Willow Springs—50 at \$19 b. 30 ds.; 30 at 18, br. 30 ds.; 20 at 16; 25 at 15.

## COPPER STOCKS.

Napoleon—4 at 24.

## VIRGINIA CITY STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Ask'd		Bid	Ask'd
Asbland	—	9	Koh-i-noor	\$100	150
Adriatic	7	10	Leon	25	30
Allen	65	—	La Crosse	10	12
Atchison	150	—	Laboring	11	—
American Basin Co.	20	25	Mason	—	—
Belvidere	16	20	McBee	65	70
Balsam	40	45	Mary Ann	20	25
Bullion (consolidated)	40	—	Monterey	7	—
Burnside	45	60	Monarch	—	20
Burning Moscow	125	—	Madison	—	20
Beach & Paxton	225	—	Michigan	5	—
Baltimore American	—	—	North American	7	—
Bald Eagle	—	—	Nevada	—	—
Bloomington	5	—	North Ophir, (nominal)	—	—
Blue Ledge, (Reese River)	—	—	Oriental	5	7
Buchanan	—	—	Oscola	12	15
Belcher	125	—	Pride of the West	100	125
Branch Mint	6	—	Pioneer	—	—
Cedar Hill Tunnel	—	—	Pride of Washoe	30	35
Caledonia	15	20	Phoebe	40	—
Comet (Simpsott's Park)	—	—	Philadelphia	—	—
Cole	15	—	Recorder	20	—
Commercial	10	—	Santa Rita	60	70
Consolidated Cedar Hill	4	—	Santa Fe	12	—
Dargan	5	—	Summit, (nominal)	—	—
Dayton Company	—	—	Swezey	—	—
Deeatur	—	—	St. George	4	—
Desert	4	5	Siadon	17	—
Empire	—	—	Sierra Nevada	70	—
El Dorado	70	—	Sierra	22	—
Eureka	40	45	Sacramento	63	65
Ever'ug Star, Argent'io Dist	—	—	Sigel	—	—
Empire Co. (Spring Val.)	60	55	Shamrock	—	—
Governor Nye	8	9	South Burnside	—	—
Golden Gate	5	6	Union (Virginia District)	8	10
Grass Valley	20	—	Union, Gold Hill	—	—
Golden Era	—	—	U. S. Mining Company	—	—
Golden Eagle	10	12	U. S. Tunnel	5	8
Hazel Green	5	—	Uncle Sam	5	—
Harrison, Virginia Locomo	25	30	Utah	—	—
Harrison, San Fran. Incor.	7	8	Virginia	—	—
Hawkeye	20	—	Washington	12	—
Hawley	20	—	York	5	—
Industrious	—	—	Yolo	20	25
Irvine	60	—	Yellow Jacket	325	350
Insurance	15	—	Zouave	20	—

## WASHOE STOCK REMARKS.

For the week ending March 28th 1883.

[Compiled from the Daily Territorial Enterprise.]

The business of the past week has been large and generally satisfactory. Stocks to an unusual large amount have changed hands, mostly at advanced prices. The claims sharing the principal attention during the past week have been the Lady Bryan, Shamrock, Fairview, Bloomington, Harrison, Grass Valley, Burning Moscow, Burnside, Laboring, Eureka, Overman, Belcher, Leon, Union, Pines, Zouave, etc.

Reese River stock is being dealt in sparingly. \$30 is offered for Masonic, on Lander Ledge, and Comet and Blue Lead are saleable at variable rates. Gold Hill stocks are still meeting with marked favor.

The Lady Bryan has been the chief object of attraction during the week. The new interest with regard to this mine has been caused by a strike of rich rock, much resembling 2nd class Ophir. This stock has gradually advanced during the past week from \$10 to \$17, at which latter figure it closed with an upward tendency. \$9 to \$25 is generally asked.

Grass Valley, which has been favorably operated upon by the Chollar-Potosi decision, gradually advanced from \$10 to \$36 and \$36, which latter figure it reached on the 24th inst. From that time it commenced to decline and at the present close of the week it may be quoted at \$20 to \$25, with a downward tendency.

Burning Moscow, was in the market in small lots on Wednesday, at \$200, without purchasers. It was quoted on that day at \$100. On Saturday it had declined to \$100, yet it is still held above quotations at the Bay.

Sacramento has been somewhat variable during the week. It was offered liberally at \$60 to \$65 on Tuesday, without takers. It improved slightly on Wednesday in consequence of orders from below, and still further advances are reported to-day. It may now be quoted firm at \$60 with demand. Mitou is again finding its way into market, but is held at \$85 to \$95.

Santa Rita is in light demand at an advance. It may be quoted at \$65. La Crosse, whenever offered at low rates is eagerly caught up.

Bloomington is in request at \$4 to \$5, and is marketable at these figures. Oriental has somewhat lost favor, which has been gained by the Dargan the elder title. The latter is saleable at from \$5 to \$6.

Utah is in market in small lots and is quotable at \$45 to \$50. Bullion is saleable at \$40 to \$45. Belcher is advancing.

El Dorado is rapidly gaining in the market and is held at \$90 to \$100.

Watson, the new consolidation north of the Madison, is held firmly at healthy rates. There is a light demand for it at \$8 to \$10, with little or none in market.

Fairview is readily purchased at \$45 to \$50.

Laboring, Gold Hill, has been in request all the week at \$10 to \$12, and 200 or 300 feet have changed hands at these figures. The company claims a ledge, if any there be, between the Union and Yellow Jacket.

Eureka, Gold Hill has not fluctuated during the week. It is quoted at at \$35 to 40, with as many buyers as sellers.

Overman has gained slowly since Monday and cannot be quoted at less than \$85. A large number of shares were sold during the week at \$30 to \$35.

Belcher, Gold Hill, has steadily advanced and cannot be quoted at less than \$40 to \$50. It is held firmly at these figures.

Caledonia Tunnel, Gold Hill, has taken a stride upward, and is in request at \$14.

Very fine specimens of ore are being taken from Massillon, at Gold Hill, which have occasioned considerable comment, and threaten of a suit with La Plata Oro.

Reese River stock is being dealt in sparingly; \$30 is offered for Masonic, Lander Ledge, and Comet and Blue Lead are saleable at variable rates.

Iowa is marketable at a shade below San Francisco figures; \$110 is offered. Madison is again finding its way into market at \$22 to 25, with little or no request at these rates.

Shamrock may be quoted at \$12 to \$15, with little demand. Birdsell is offered in small lots at \$45, but is dealt in sparingly.

For Beach & Paxton \$225 is offered for large lots, and \$350 to 400 is asked. This ground seems to have no fixed market rate. The asking and bidding prices do not approximate to within speaking distance.

Union is saleable in limited quantities at \$80. Bullion is saleable at \$42 to 45; 32 feet sold to-day at these figures.

## ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Asked		Bid	Asked
Amador	—	5	Heath	\$10	15
Atlantic	2	—	Herman Consol	—	15
Arcade	8	10	Home Check	—	5
Antelope	—	375	Live Yankee	15	—
Alturus	15	—	Lord Byron	7	—
Atchison	6	10	La Plata	10	12
Brazier	5	10	Main Esmeralda	55	—
Bodie Bull Consolidation	20	—	Mourou	85	—
Bright Star	15	—	McKinstry Tunnel Co.	3½	—
Bamboo	—	—	Mount Brady	3	3
Bullion (Van Horn Dist.)	10	10	New Esmeralda Consol.	—	12
Bodie Bull, No. 1	16	—	Newtown	60	—
Bodie Bull, No. 2	6	—	Nevada	—	—
Bunker Hill	10	12	Nevada Tan'l Co.	1000	—
Climax	—	12½	Old Winnemucca	10	10
Climax	—	25	Paid Tunnel Co.	—	2
Columbia	—	5	Pacific	5	10
Camp	—	—	Pond	—	100
Del Monte	120	130	Pride of Antelope	—	5
Dargan	—	9	Peru (two ft. to the share)	8	10
Delta	—	10	Real Del Monte	90	—
East Essex Ex. Ural	—	10	Strawberry	20	—
Empire	28	—	Silver Hill	—	60
Fallstaff	5	6	St. Louis	5	—
Fallstaff Consolidation	4	6	Tiger	—	4
Fresno	9	9	Union Tunnel	20	30
Full of City	—	4	Utah	—	100
Great Eastern	—	1	Union Tunnel	—	80
General Hooker (Con.)	20	30	Ural proper	—	625
General Jackson	13½	14	Ural [extension]	—	10
Garibaldi	50	—	William Tell	—	2½
Golden Harvest	—	5	Wide West	375	400
Golden Cross	12½	—	X-Ehza and Constantino	—	—
Golden Age	20	25	consolidated	1½	—
Hauover	12	25			



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value	shrs per foot.	ass'ts to date	Name of Company	Locality of Mine	Name of Secretary.	Locality of Office	Capital stock.	Par Value	shrs per foot.	ass'ts to date
RUTH WINDSOR TUN' CO	Esmeralda District	T. L. Bibbins.	305 Montgomery st	\$100,000	\$100	1	\$	MORAY, G. S. & Copper	La Paz, Colorado.	G. J. Turner.	606 Montgomery st	\$250,000	\$250	3 ft	\$
ANTHONY & SUTHERLAND	Esmeralda District	T. L. Bibbins.	305 Montgomery st	400,000	500	1	none	BLICE RIDGE MINING CO.	Slate Range.	G. J. Turner.	606 Montgomery st	240,000	100	2 ft	none
JEFFERSON	Esmeralda District	T. L. Bibbins.	305 Montgomery st	500,000	500	1	none	MADISON, SLATE RANGE	Slate Range.	G. J. Turner.	606 Montgomery st	264,500	100	2 ft	none
COOK	Esmeralda District	T. L. Bibbins.	305 Montgomery st	60,000	100	1	none	SAN FRANCISCO SLATE RANGE	Slate Range.	G. J. Turner.	606 Montgomery st	210,000	100	2 ft	none
CHADAR	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	none	CATYRA MINING CO.	Slate Range.	G. J. Turner.	606 Montgomery st	195,000	100	2 ft	none
SOTOMAYOR	Esmeralda District	T. L. Bibbins.	305 Montgomery st	140,000	100	1	none	TRIDITION	Virginia District.	N. Chiverick.	Mer. st. Mtngy blk	600,000	500	1	none
SENECA	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	none	COLE	Virginia District.	W. E. Wood.	123 California st.	1,500,000	500	1	35,000
RED WHITE & BLUE G & S	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	600	HAWLEY	Devil's Gate Dist.	C. Stevens.	6 Parrots Building	880,000	400	1	2,200
LILLY OF THE WEST G & S	Esmeralda District	T. L. Bibbins.	305 Montgomery st	140,000	100	1	none	PETRONA	Virginia District.	C. Stevens.	6 Parrots Building	100,000	100	1	none
ESTICK	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	none	CLARK CREEK	Eagle & Washo dis	C. Stevens.	6 Parrots Building	1,100,000	500	1	none
BULLION	Van Horn District.	T. L. Bibbins.	305 Montgomery st	300,000	100	1	none	MASIDORA	Sonora, Mexico.	F. H. Waterman.	618 Merchant str	240,000	100	1	none
LAUREL HILL Mining Co.	Yuma County	C. S. Higgins.	410 Montgomery st	1,620,000	100	1	290	ROBES DRUMS Q M CO	Esmeralda District	E. Daniels.	Cashier Custom Hs	600,000	500	1	none
UNION	Russ District.	C. S. Higgins.	410 Montgomery st	990,000	50	2	5,275	SAX WRIGHT	Sacramento Co	E. Worth.	414 Montgomery st	870,000	400	1	2,280
COMBINATION	Russ District.	C. S. Higgins.	410 Montgomery st	405,000	50	2	1,700	ST. CLAIR	Aurora, Mono Co.	E. Worth.	547 Washington st	120,000	200	1	none
BULLION	Russ District.	C. S. Higgins.	410 Montgomery st	126,000	500	2	68,000	FEDERAL UNION	Aurora, Mono Co.	J. F. Bailey.	40 Montgomery Blk	800,000	500	1	600
WHITE & MURPHY, G & S	Virginia District.	J. P. Nourse.	Lucas & Turners bg	2,200,000	100	1	23,000	JOSEPHINE	Coso District.	W. W. Lawton.	Stevens House.	1,200,000	250	1	none
MINYA PRIETA	Sonora, Mexico.	J. P. Nourse.	Lucas & Turners bg	450,000	100	2	45,000	JEWELL	Devil's Gate.	John Armstrong.	610 Merchant st	120,000	200	1	300
BURNING MOSCOW	Virginia District.	J. P. Nourse.	Lucas & Turners bg	280,000	100	1	3,200	Nevada Copper Mfg. Co.	Grass Val. Nev. Co.	John Armstrong.	610 Merchant str.	240,000	200	2	1,550
BUCKEYE	Silver City.	F. S. Carter.	415 Sansome st.	165,000	500	1	1,050	Cerro Secos	Esmeralda District.	John Armstrong.	610 Montgomery Blk	60,000	50	1	none
AMERICAN	Esmeralda District.	A. H. Clark.	522 Washington st	1,050,000	500	1	1,050	JOHN HAYES	Esmeralda District.	J. H. Blood.	7 Montgomery Blk	50,000	50	1	none
SLATE RANGE	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	TREDESSER	Esmeralda District.	J. H. Blood.	7 Montgomery Blk	100,000	100	1	none
ROCHESTER	Slate Range Distr.	A. H. Clark.	522 Washington st	815,000	150	1	none	SAN PATECH	Esmeralda District.	J. H. Blood.	7 Montgomery Blk	100,000	100	1	none
PAIDELPHIA	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	FULTON	Esmeralda District.	J. H. Blood.	7 Montgomery Blk	100,000	100	1	none
NEW YORK	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	Kohler Bro's	San Antonio, L. C.	Kohler Bro's	Sansome street.	24,000	100	1	none
CATARAUGUS	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	Lucerne Mining Co.	Gold Hill District.	J. S. Paxton.	800,000	500	1	20,500	
ALBANY	Slate Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	4,500	Mont Davidson G & S	Virginia District.	F. A. Babens.	47 Montgomery Blk	2,000,000	100	44 in	20,500
LAF BRYAN	Slate Range Distr.	F. Bailey.	522 Washington st	600,000	100	1	5,000	Mosk	Virginia District.	E. B. Holmes.	712 Montgomery st	2,400,000	100	1	2,750
DEBERT M. CO.	Flowerly District.	David Wilder	522 Washington st	440,000	150	1	60	Pioneer Coso	Coso District.	M. B. Holmes.	616 merchant str.	660,000	100	1	none
ADRIATIC	Flowerly District.	S. R. Rooney.	7 & 8 Gov't House	270,000	100	1	600	Manzanillo	Sinaloa, Mexico.	E. Eddy.	616 merchant str.	660,000	100	1	none
EVERETT	Humboldt, N. Ter.	J. H. Gager.	Merch st. mtnt blk	440,000	100	1	60	Moss	Virginia District.	R. T. C. Page.	428 Montgomery st.	600,000	500	1	none
NORTH STAR	Humboldt, N. Ter.	J. H. Gager.	Merch st. mtnt blk	200,000	100	1	60	Madison	Virginia District.	P. B. Cornwall.	608 merchant str.	800,000	500	1	none
CRYSTOL	Silver Mt. mono.	J. H. Gager.	Merch st. mtnt blk	300,000	300	1	1,350	South Utah	Esmeralda District.	P. B. Cornwall.	608 merchant str.	400,000	100	1	none
ESTRELLA DEL MONTE	Humboldt dis. n.t.	J. H. Gager.	Merch st. mtnt blk	252,000	210	1	67	Melones & Stanislaus	Calaveras County.	L. Francioni.	Lucas & Turner bg	150,000	50	18 in	none
MANHATTAN	Humboldt dis. n.t.	J. H. Gager.	Merch st. mtnt blk	252,000	210	1	67	Alameda Coal Min'g Co.	Alameda County.	L. Francioni.	Lucas & Turner bg	150,000	50	18 in	6,000
LIVE OAK COPPER	Humboldt, N. Ter.	J. H. Gager.	Merch st. mtnt blk	252,000	210	1	67	Kate	Humboldt Nev. Ter.	L. Francioni.	Lucas & Turner bg	150,000	50	18 in	6,000
SIGMA	Humboldt, N. Ter.	J. H. Gager.	Merch st. mtnt blk	252,000	210	1	67	Hope	Humboldt Nev. Ter.	L. Francioni.	Lucas & Turner bg	150,000	50	18 in	6,000
OCCIDENTAL	Esmeralda District.	J. H. Gager.	Merch st. mtnt blk	252,000	210	1	67	Ophir	Virginia District.	T. J. Lamb.	Cor. Bat. & Wash.	150,000	100	1	2,600
ANNIS LAURA	Humboldt District.	J. H. Gager.	Merch st. mtnt blk	252,000	210	1	67	Santiago	Silver City District.	E. A. Breed.	Cor. Bat. & Wash.	150,000	100	1	2,600
STAIRLIGHT	Humboldt District.	J. H. Gager.	Merch st. mtnt blk	252,000	210	1	67	Noble Copper Min. Co.	Calaveras county	E. A. Breed.	Cor. Bat. & Wash.	150,000	100	1	2,600
ZETA	Esmeralda District.	William Winchester	515 Sansome street	1,300,000	500	1	14,300	North Potosi	Virginia District.	E. J. Volke.	Cor. Bat. & Wash.	150,000	100	1	2,600
ALHAMBRA	Devil's Gate Dist.	W. E. Dean.	53 Montgomery Block	300,000	250	4	10,000	Norman	Virginia District.	J. H. Brewer.	40 Montgomery Blk	1,500,000	500	1	110,000
WIDE WEST	Esmeralda District.	S. Patten.	522 Montgomery st	1,700,000	400	1	14,300	Early Dawn	Devil's Gate Dist.	J. H. Brewer.	40 Montgomery Blk	200,000	250	1	none
REAL DEL MONTE, CONS.	Esmeralda District.	S. Patten.	522 Montgomery st	900,000	500	1	6,400	Porter	Lamb Ledge.	R. C. Page.	420 Montgomery st	800,000	500	1	12,000
ESMERALDA MINING CO.	Esmeralda District.	S. Patten.	522 Montgomery st	1,600,000	1,000	1	13,200	Scorpion	Virginia District.	W. H. Martin.	617 Clay street.	400,000	100	1	12,000
ESMERALDA, N. EXTENS'N	Esmeralda District.	S. Patten.	522 Montgomery st	1,500,000	500	1	6,750	Ruby	Star District.	W. H. Martin.	617 Clay street.	120,000	100	2	120
SILVER HILL, CONSOLID'ED	Esmeralda District.	S. Patten.	522 Montgomery st	600,000	500	1	27,000	Silver City	Silver City.	O. Risdon, Jr.	Cor. Bat. & Bnsh st.	1,000,000	100	1	12,600
ANTHONY	Silver City District.	J. F. Pope.	115 California st.	200,000	100	1	1,000	Succor	Gold Hill District.	R. H. Waller.	1 Montgomery blk	240,000	100	1	23,600
LOUISA	Flowerly District.	J. F. Pope.	115 California st.	900,000	300	1	4,500	Sierra	Sierra District.	S. P. Vandyske	127 Clay street.	500,000	250	1	none
ALAMO	Lower California.	S. Sprague	Cor Cal & Sansome	72,000	500	1	8,400	Albion	Silver City.	E. Bauer.	414 Washington	1,200,000	100	1	none
BELLA VISTA	Virginia District.	E. C. Lovell.	712 Montgomery st	280,000	100	1	8,400	Milwaukee	Slate Range.	W. H. Clarke.	224 Montgomery st	270,000	100	1	none
BURNSIDE	Esmeralda District.	R. N. Van Brunt.	706 Montgomery st	800,000	400	1	16,600	Morrow, East.	Slate Range.	W. H. Clarke.	224 Montgomery st	180,000	100	1	none
BADDER	Virginia District.	R. N. Van Brunt.	706 Montgomery st	1,200,000	1,000	1	16,600	Albany, East.	Slate Range.	W. H. Clarke.	224 Montgomery st	180,000	100	1	none
IOWA	Virginia District.	R. N. Van Brunt.	706 Montgomery st	1,200,000	1,000	1	16,600	Mountain View	Slate Range.	W. H. Clarke.	224 Montgomery st	240,000	100	1	none
LATROBE TUN & Mfg Co	Virginia District.	R. N. Van Brunt.	706 Montgomery st	80,000	50	1	17,900	Washington	Slate Range.	W. H. Clarke.	224 Montgomery st	210,000	100	1	none
NORTON	Reese River Distr.	R. N. Van Brunt.	706 Montgomery st	1,200,000	1,000	1	17,900	Sacramento, East.	Virginia District.	Nelson Hudson.	Front street.	1,200,000	500	1	none
REESE RIVER	Reese River Distr.	R. N. Van Brunt.	706 Montgomery st	264,000	90	1	17,900	Santa Rosa	Virginia District.	S. W. Moore.	408 California st.	900,000	500	1	none
SAN MARCEL	Virginia Dist.	G. B. McAneny.	712 Montgomery st	1,600,000	1,000	1	108,000	Willow Springs G & S	Coso District.	J. H. Sayre.	224 Montgomery st	270,000	100	1	none
SATON Mining Co.	Virginia Dist.	D. W. Young.	Cor Mont & Jckn.	1,080,000	300	13ft	144,000	Sol Lewis	Esmeralda District.	H. C. Chambers.	622 merchant st.	700,000	500	1	none
CALIFORNIA	Virginia Dist.	G. B. McAneny.	712 Montgomery st	540,000	300	1	2,800	Tesoro	Lower California.	H. C. Chambers.	cor Sanome & cal.	540,000	100	1	none
CENTRAL	Virginia Dist.	C. L. Farrington.	509 Sacramento st	1,000,000	500	1	10,000	United States	Virginia District.	S. R. Rooney.	7 & 8 Gov't House	200,000	100	1	none
CEDAR HILL M. & T. Co.	Virginia District.	W. E. Dean.	53 Montgomery Block	1,680,000	300	4	10,000	Villanar Mining Co.	Lower California.	J. D. Creigh.	cor. mer a mont st	240,000	100	1	none
CHOLLAR	Silver City.	W. E. Dean.	53 Montgomery Block	300,000	250	1	10,000	Washoe	Gold Hill District.	D. A. Jones.	Jackson cor. Frnt	1,000,000	500	1	none
CHENANGO	Gold Hill District.	J. H. Jones.	321 Front street.	54,000	30	\$	3	Coso	Coso District.	E. W. Chambers.	11 Court Block.	1,950,000	500	1	600
CHOW POINT	Esmeralda District.	James Neary	326 Clay st.	60,000	100	1	600	Pride of Esmeralda	Esmeralda District.	J. F. Bailey.	40 Montgomery blk	300,000	500	1	600
CRAWLEY	Esmeralda District.	James Neary	326 Clay st.	60,000	100	1	600	Ida G. S. Mining Co	Russ District.	David Wilder	522 Montgomery blk	510,000	300	2	500
CORCORAN	Esmeralda District.	James Neary	326 Clay st.	60,000	100	1	600	Table Mountain Cop. Co	Calaveras County	M. G. Elmore.	500 Montgomery y st	787,000	250	1	none
EXMINT	Esmeralda District.	James Neary	326 Clay st.	60,000	100	1	600	Olmsa G. & S. M. Co.	P. R. dis. Humb'lt	M. G. Elmore.	500 Montgomery y st	800,000	500	1	3
DOYLE	Esmeralda District.	James Neary	326 Clay st.	60,000	100	1	600	Rip Van Winkle G & S	Esmeralda District.	M. G. Elmore.	500 Montgomery y st	800,000	500	1	2
ISAACS	Esmeralda District.	James Neary	326 Clay st.	60,000	100	1	600	Schmelzter	American dis Hum	M. G. Elmore.	500 Montgomery y st	800,000	500	1	420
KOHLER	Esmeralda District.	James Neary	326 Clay st.	60,000	100	1	600	Son Francisco G & S M Co	Flowerly District.	James Peck	707 Sansome st.	1,000,000	500	1	none
LIVINGSTON	Esmeralda District.	James Neary	326 Clay st.	60,000	100	1	600	Foundation M. & T. Co.	Esmeralda District.	A. Davidson.	Oakland	300,000	100	1	1,600
VIRIARD	Esmeralda District.	James Neary	326 Clay st.	60,000	100	1	600	Francisco Americano	San Antonio L. Cal	A. S. Gould.	508 clay street.	450,000	750	10 ft	none
LAS CRUCITAS Mining Co	Esmeralda District.	Joseph R. Beard.	4 Armyory Hall.	1,600,000	200	1	400	Gaudaloupe	Chihuahua, Mexico	Wm. Blackwood.	724 mdrchant st.	50,000	100	1	none
DANE	Esmeralda District.	Joseph R. Beard.	4 Armyory Hall.	240,000	300	1	400	Gold Hill O. M. & M Co	Gold Hill District.	Charles Pioda.	627 Front street.	50,000	100	1	none
LILY DALE	Esmeralda District.	Joseph R. Beard.	4 Armyory Hall.	210,000	300	1	350	Governor Nye	Devil's Gate Distr.	George M. Blake.	416 clay street.	980,000	200	1	450
MAMMOTHE, No. 1	Esmeralda District.	Joseph R. Beard.	4 Armyory Hall.	1,000,000	500	1	1,950	Gold Hill Union mills.	Gold Hill District.	J. F. Sterling.	327 commercial st.	120,000	100	1	none
MOUNT HOPE	Esmeralda District.	Joseph R. Beard.	4 Armyory Hall.	210,000	300	1	350	Great Western M. Co.	Tulare County	Barley Healey.	Express Building	180,000	100	1	none
SOLEDAD	Esmeralda District.	George H. Russell.	636 Sacramento st	780,000	100	1	2,100	Flowers Hill Company	Gold Hill District.	F. W. Grass.	712 Montgomery st.	140,000	100	1	none
COPPER HILL	Esmeralda District.	J. B. Cornwall.	608 Merchant st	400,000	1,000	1	1,000	Hale & Norcross	Virginia District.	J. F. Lightner.	metropolitan blk.	400,000	500	2	none
MADISON	Esmeralda District.	J. B. Cornwall.	608 Merchant st	400,000	1,000	1	1,000	Potosi	Virginia District.	J. F. Lightner.	metropolitan blk.	400,000	500	2	none
SOUTH UTAH	Esmeralda District.	J. B. Cornwall.	608 Merchant st	400,000	1,000	1	1,000	Carrie Bell	Esmeralda District.	Wm L. Duncan.	Pioneer Building.	140,000	100	1	280
NEVADA MINING CO.	Esmeralda District.	J. B. Cornwall.	608 Merchant st	400,000	1,000	1	1,000	Mayflower							



**Volcanic Smelting Furnace.**

PERSONS DESIRING INFORMATION AS TO THE USE of a economical process of this Furnace, and its tendency to make use of the same, when supplied of superphosphate over all other means of reducing ores and separating metals from the sulphurates, can obtain all needed explanation and advice in regard to the same, and the terms of sale of rights to use the same, on application Col J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietress through the Post Office of San Francisco. Drawings may be seen at the office of Col J. D. Stevenson, No. 614 Market street, or at the office of T. Ogg Shaw, in Brannan's Building, Montgomery street.

The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form.

The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of capacity for smelting one ton of ore or more, on signing an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention or a longer period than two months.

Feb 16 MRS. E. J. HALL, M.D., Proprietress.

**New Style of Lady's Buckle.**

W. BOHM, INVENTOR & PATENTEE

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It excels all other buckles in

**Usefulness, Strength and Appearance.**

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of

BRADYMAN & LEVY,  
621 Washington street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 1 Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold will be guaranteed as to its Strength and Durability.

W. BOHM, Patentee.

## LEANDER RANSOM, Civil Engineer AND SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

CROCKERY,  
GLASS WARE,

FRENCH CHINA,

Coal Oil Lamps, Table Cutlery,

CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.,

NO. 516 SANSOME STREET,

[CORNER OF MERCHANT,]

no 16

SAN FRANCISCO.

**Attention! Attention!**

A TRACT OF LAND, EMBRACING AN AREA OF 400 Acres has recently been surveyed and plotted out into lots, which are now offered for sale on reasonable terms as any ever offered by the various Homestead Associations in our city. The tract is known as the "University Mount Survey," and derives its name from the fact that the Directors of the University College have selected a site of about twenty acres in the center of the tract for their College Building and Park. This property is more beautiful than any other ever offered in this market, and its location is such that it must in the natural progress of improvement soon be in great demand for places of residence. That this property will increase in value, is as certain as the future of San Francisco.

Investments in Real Estate, it is well known, have paid as largely as any other, and insurance against risk of depreciation in value is secured by the sure and rapid increase of our population.

Invest in Real Estate, and you will find it more profitable than investing in wild-cat mining stock, or loaning money that may be paid in depreciated currency.

The prices for lots in the above tract will remain uniform until after the holidays—that is, without interest. The title to the land is perfect.

For further particulars apply to

HARVEY S. BROWN,  
No. 19 Naglee's Building.

Lithographic Maps can be seen and had at the above named office. no 13 6mo

**A. ROMAN & Co.,**

WHOLESALE AND RETAIL

**Book Establishment,**

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Dartington.

Manual of Metallurgy, most particularly of the precious metals, but including such others as are employed in dental practice.

Pigot on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman. Gold Mining and Assaying, by Phelps.

Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide, or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines. Weisbach's Mechanics of Machinery and Engineering. Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis. Together with many other works in this and similar lines

Books imported to order on short notice. A

A ROMAN & Co.  
417 & 419 Montgomery Street.

**READ THIS!**

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flame, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

**THEN THIS!****Comet Illuminating Oil!**

Manufactured expressly for Stanford Bro.

THIS POPULAR

**Brand of Kerosene**

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,  
Nos. 121, 123 and 125 California street.

**Zur Beachtung für Erfinder.**

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Skizzen von Erfindungen mit kurzen, deutlich gezeichneten Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

**Gird's Budding Knife.**

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutters, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentee),

sepl-3m San Francisco

**The Occidental Hotel**

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**

AND A LARGE

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

**MUSIC! MUSIC!!**

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments & Musical Merchandise

SHEET MUSIC & MUSICAL BOOKS.

GENUINE ROMAN STRINGS, &c.,

Light's New Patent Insulated Iron Frame

is put into all of

LIGHTS & BRADY'S OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

Intone, delicacy of touch and durability.

All the leading Musicians of the country have testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

MELODEONS AND HARMONIUMS,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN,

Warranted superior to all others.

Send for a catalogue and Price list.

oct

A. KOHLER, Agent.

**To Mill Owners.**

WANTED, by a person fully competent to the position, a situation as **MIXING SUPERINTENDENT** in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assayer of Copper Ore. He can give ample testimonies as to his capacity for the position he seeks.

Apply at this Office.

**W. T. & J. GARRATT,**

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of all sizes. Manufacturers of Garratt's Patent Improved Journal Metal.

**SQUARZA'S PUNCH.**

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR

FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

**LATEST IMPROVEMENT  
in Ladies' Buckles.**

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERIK REICHEL,

Manufacturing Jeweler,  
629 Merchant street, San Francisco.

**GREAT REDUCTION  
IN PRICES.**

STANFORD BROTHERS,

121, 123 and 125 California street,

Keep the Largest Stock of all Kinds of

**Lamp Stock**

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL,

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. apl6tf

**50 lbs. MARINE AND  
Fire-Proof Paint,**

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linsseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linsseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUE, Superintendent.

WORKS, North Beach; Office, 318 California st., San Francisco.

**WRIGHT'S PICKS.**

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.

**REMOVAL.**

OFFICE OF THE PACIFIC METALurgical Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
318 California street, near Sansome, up stairs.



## SPECIAL NOTICES.

**Office of the San Francisco Gold and Silver Mining Company.** San Francisco, March 16, 1863. The Annual Meeting of the above named Company will be held at the Company's Office, No. 7, Montgomery Block, on Monday, April 6, at 1 o'clock, P. M.  
Mar. 16-td J. H. BLOOD, Secretary.

**Office of the Tennessee Gold and Silver Mining Company.** San Francisco, March, 16, 1863.—The Annual Meeting of the Stockholders of the above named Company will be held at the company's Office, No. 7, Montgomery Block, on Monday, April 6, 1863.  
mar16-td J. H. BLOOD, Secretary.

## New Patent Agency.

**WE HAVE CONNECTED WITH THE**  
Publication of the "MINING AND SCIENTIFIC PRESS"

## The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

## Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at  
Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco.  
EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building.  
EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate.  
EWER & SMITH.

## PATENT RIGHTS.

**Patent Rights Bought and Sold,**  
At the office of the "Mining and Scientific Press" Agency.  
EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper Free of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors.  
EWER & SMITH.

## The Pacific Patent Agency

HAS BEEN REMOVED to No. 625 Merchant street, to the office of  
WM. LOEWY, Esq., Attorney at Law.

## MYERS &amp; DAGGETT'S

**Mining and Stock Exchange,**  
No. 23½ B Street, Virginia City, N. T.

**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\*.\* Abstracts of Titles Furnished, Etc.

## FREDERICK MANSELL,

**MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,**

No. 422 California street, corner of Leidsdorf.

Drawings of MODELS made for parties applying for patents at Washington or London.  
mar23 2m

## JULIUS SILVERSMITH,

**Commissioner for Nevada Territory,  
OFFICE, IN LATE STATE CAPITOL,**

Corner of Battery & Washington streets,  
Room 23, up stairs.

**WE WOULD RESPECTFULLY SOLICIT FROM THOSE** who have business relations with the above named Territory, a share of their patronage in all matters requiring the official action of a Commissioner—such as the drawing up of affidavits, acknowledgments, the taking testimony, etc.

## P. M. STEAMSHIP COMPANY.

## NOTICE.

**Until further notice, the Steamers of**  
Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above dat a fail on Sunday, the steam or will be dispatched on the following Monday.  
A. B. FORBES, Agent.

## FULTON FOUNDRY &amp; IRON WORKS

## HINCKLEY &amp; CO.,

MANUFACTURERS OF

## Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON  
FRONTS, FOR BUILDINGS, MINING PUMPS,  
AND ALL KINDS OF MACHINERY, ETC.,

## FIRST STREET,

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*.\* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done. Prices low.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

## TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

## THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will Save in Transportation Material and Labor, from 25 to 50 per cent. of the entire cost of the Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address  
J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan19-1f

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

**WETHERED & TIFFANY,**  
Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

## REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

Real Estate Purchased and sold, and Loans Negotiated.

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the said. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\*.\* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
no16-1f ZENAS WHEELER.

## PEOPLE'S

Steamship Line!  
CONNECTING  
CALIFORNIA AND NEW YORK,  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

## MOSES TAYLOR,

J. H. BLETHEN.....COMMANDER,

Will be dispatched for

## San Juan del Sur,

From Mission street Wharf.  
Punctually at 9 o'clock, A. M., on

WEDNESDAY, - - - APRIL 22, 1863.

Connecting at GREYTOWN with the Splendid Steamship  
ILLINOIS.....2500 Tons.

Reduced rates of Passage and quick trips are secured by the re opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers

For further information apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, opp. Post Office.

## P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S**  
line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of April, 1863.

April 13th, - - - - Steamer Golden Age.

April 22d, - - - - Steamer Sonora.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.  
je4 Corner of Sacramento and Leidesdorf sts.

## Miners' Foundry

—AND—

## MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\*.\* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.  
HOWLAND, ANGEL & KING.  
San Francisco, February 23, 1863.

## DONAHUE'S

## Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

**MANUFACTURE STEAM ENGINES,  
SAW AND GRAIST Mill Machinery.** Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.  
PETER DONAHUE

## PALMER, HANSCOM &amp; CO.,

## GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

## To Quartz Miners.

**Knox's Improved  
AMALGAMATING PAN,**

WITH  
PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its use it is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching floating gold and silver, known to be otherwise lost. Made exclusively by  
PALMER, HANSCOMB & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

## VULCAN IRON WORKS CO.

P. TORQUET.....MANAGER.

R. IVERS. C. R. STEIGER. S. AITKEN.

## Steam Engine Builders,

**Boiler Makers, Iron Founders and General Engineers,**

Nos. 137 & 139 FIRST STREET, - - - - SAN FRANCISCO.

STEAMBOAT MACHINERY built and repaired; also Saw, Flour and Quartz Mills, Pumping and Mining Machinery, etc., etc., etc.

Proprietors of **Morse's Patent Fire Grates,**  
JOVAL, FOURNEYTON and other Turbine Water Wheels with latest improvements.

## DEETKEN'S

## Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

\*.\* Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose.  
nov8-3m

## LEWIS COFFEY AND RISDON,

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

## JAMES PHELAN,

(LATE J. & M. PHELAN.)

## IMPORTER AND JOBBER,

## Wines, Liquors, Etc., Etc.,

Nps. 616 & 618 Front street,  
Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-1f.

## THEODOR KALLENBERG

## Maker of Models

FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.;** Steel Stamps, Dies and the Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
San Francisco.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, APRIL 13, 1863.

NO. 24.

#### PRODUCTION OF COPPER IN GREAT BRITAIN.

In 1861 there were 139 mines worked for copper in England and Wales, eight in Ireland, and several in other parts of the British dominions. The entire yield of these mines, in ore, was 231,487 tons, valued at \$6,800,000, or a fraction over \$29 to the ton. The amount of fine copper realized from this ore was 15,331 tons valued at \$7,838,000. The difference between the total valuation of the ores produced and the value of the fine copper realized, should represent the costs of working and refining. This we find is but \$4 48 per ton of ore.

**COPPER YIELD OF GREAT BRITAIN AND THE UNITED STATES.**—The United States, in all probability, will next year become the largest copper producing country, in the world. The yield of copper, in Great Britain, for 1861 is set down at \$7,838,000. The value of rough copper shipped from Lake Superior in 1862 was \$4,000,000. The value of this shipment when refined will be enhanced about \$838,000, thus making the difference of yield between Great Britain and the United States, only \$3,000,000. The rapidly increasing yield of the Lake Superior mines added to what may be expected from California another year, will probably wipe out this difference and place this country ahead of England in its copper yield. According to present appearances, it is not unreasonable to conclude that it will not be many years before California will bring to market a larger amount of rough copper and copper ore than all the world besides.

**VALUE OF RAILROADS.**—We commend the following, from an English writer on the subject of railways, to the people of California:

"Railways have, when properly selected, been invariably attended with the following results: Increased Government revenue; increased value of all property; increased cultivation and produce, and expansion of manufactures; increased accommodation to all classes for intercommunication; diminished cost of all descriptions of goods to consumers, and increased consumption by accession of numbers; a measure of universal benefit without a drawback or objection, if selected and carried out under due provisions, with judgement and discretion."

A correspondent of the *Westminster Review*, speaking on the same subject, says:

"Wherever railroads are constructed—whether they cross the American Continent, and link the Atlantic and Pacific Oceans, or line the banks of the Thames, the Rhine, the Danube, and the Euphrates; traverse the burning plains of Hindostan, or the snows of Siberia—the maxim enunciated by Mr. Pease of Darlington, when railways were only experiments, on the success of which he had risked his fortune, will equally hold good, and remain unquestionable evidence of his largeness of view and soundness of judgment: 'Let the country but make the railroads and the railroads will make the country.'"

**ONE HUNDRED THOUSAND COMING!**—Captain Crawford, who commands the escort provided by the Government for the protection of the present year's Overland emigration reports, by telegraph, March 30, that 50,000 emigrants were already en route for California, and that the number for the entire season would reach 100,000.

#### ELECTRICAL PROCESS FOR AMALGAMATING GOLD AND SILVER.

For some months past, Messrs. Norton & Eddy, No. 616 Merchant St., have been quietly operating and bringing to perfection, so far as may be, what appears to be a very important improvement in the amalgamation of the precious metals, by the application thereto of the principle of electricity. The process, which has been patented, and which is known as the "Norton & Eddy Process," is simply the application of a current of electricity, generated in a battery, to the mass of pulp in the pan. Any ordinary amalgamating pan may be used, by simply placing a battery of moderate power, having one pole connected with the quick-silver and the other with the pulp, and kept in that condition so long as the process of trituration continues with any given charge of the pan. The results, as we learn from several parties who have taken rock, and tailings to these gentlemen to be treated is most astonishing. We have one result before us where a gentleman took 50 lbs. of tailings from a quartz mill, that had passed all the usual processes of amalgamation, but which under this electrical treatment returned a further yield of \$66 to the ton. The same gentleman took several other lots of rock to Messrs. Norton & Eddy, from all of which he realized like satisfactory results. He has backed up his opinion of the process by ordering its immediate application to a mill in which he is engaged near Placerville. Other gentlemen, who have had rock subjected to this process, have expressed themselves to us in like favorable terms of its results. We chronicle these results as among the passing efforts of the day to improve and simplify the process of working ores of precious metals in this State. We have no further personal opinion to express of it than the simple fact that the process appears to be advantageous, especially as it may be applied, at a trifling expense over and above, and in connection with all others, in use. It also appears to be perfectly reasonable and philosophical. It is now an almost universal admission that electricity if not almost the sole agent, is at least a most important one in the production of most mineral deposits. Its application to them in connection with the arts, as in electrotyping, etc., is now universal and still most wonderful in its effects. If it exerts such a powerful influence over these minerals when minutely divided in the shop or laboratory, why may not the same principle be applied on a larger scale, in the quartz mill, and in collecting those minute particles which have been separated or but partially collected in the great laboratory of Nature? The experiments of Messrs. Eddy & Norton seem to answer this question most definitely. We would recommend persons interested to call and examine this process for themselves, at No. 616 Merchant St., in this city.

We understand that this process has been tried most successfully upon concentrated sulphurets. A lot of sulphurets supposed to be only of ordinary value, were recently subjected to the process, and the result showed a yield of \$2000 to the ton. The quantity worked was an ordinary charge for the pan. In addition to the introduction of this process to a mill in Placerville, we understand it will be more extensively tried in one of the principal mills in Washoe, ar-

rangements for the same having already been consummated. We shall be informed of the results at these mills as soon as they can be obtained and shall promptly communicate them to our readers.

**COPPER.**—We were shown on Saturday some very rich specimens of copper ore, taken from a vein lately opened at Rouse's Ranch near Grass Valley. The specimens were taken out at a depth of twenty-five feet below the surface, and some of them we should think contain at least eighty per cent of copper. The ledge was worked some years ago for gold, but failing to pay was abandoned. The ledge was relocated last fall by Mr. John Armstrong, as the "Excelsior Sulphuret Mine" and a company has recently been organized to work the same, under the title of the "Nevada Copper Mining Company."

**THE NAPOLEON COPPER MINE.**—This mine has recently been placed under the supervision of Mr. Joseph Powning, a gentleman who has had much experience as a copper miner, both in Cornwall and at Lake Superior. Mr. P. has also become quite largely interested in its stock. We understand that the workings at the mine are to be very materially modified and improved, a step which cannot fail to operate most beneficially upon its future. Some very rich rock has recently been struck, with good indications for continuance.

**THE LADY BRYAN.**—Mr. Owens, the Superintendent, yesterday showed us a magnificent specimen of ore from the Lady Bryan ledge. This is a ledge twelve feet in width, running north and south, with well defined walls on the east and west sides of it. The rich, or what is termed the "pay streak" in the ledge, is twelve inches wide, with black sulphurets running all through it. A shaft, now forty-three feet deep, is being sunk down along the hanging wall of the ledge. The water is already flowing into the shaft quite freely. [*Virginia City Union, April 4th.*]

**THE COMSTOCK CASE.**—In the case of the Comstock vs. Pride of the West, tried in the Third District Court, at Dayton, on Wednesday week, the jury rendered a verdict in favor of defendants. The Comstock Company will appeal the case. The suit was the third trial of the same cause, and the first in which the jury went on the ground.

**WHAT IS THOUGHT?** A fountain from which flows all good and evil intentions; a mental fluid, electrical in the force and rapidity of its movements, silently flowing unseen within its own secret avenues; yet it is the controlling power of all animated matter, and the chief mainspring of all our actions.

**WHAT IS KNOWLEDGE?** A key that unravels all mysteries, and which unlocks the entrance, and discovers new, unseen and untrodden paths in the hitherto unexplored fields of science and literature.

We understand an evening paper is about to be started in Virginia City.



## THE HUMBOLDT MINES.

The following letter, written for, and published in the *Mountain Messenger*, of the 15th of November last, contains the fullest and most complete account of the mining operations in Humboldt, which we have seen. Those of our readers who desire to post themselves with regard to this new mining region will do well to read it carefully. The letter was written by Mr. Wm. A. Holcomb, one of the earliest adventurers into that distant region, and now Treasurer of the county which has been organized there, and a most intelligent and experienced miner. He is now in this city. We have had the pleasure of several interviews with him, and he has assured us that he will hereafter keep our readers thoroughly informed with regard to mining matters in that locality, by contributing to the MINING AND SCIENTIFIC PRESS.

EDITOR MOUNTAIN MESSENGER:—Not having written you for some time past, you have perhaps come to the conclusion that I have become disgusted with silver-land, have taken up my blankets and skedaddled out of the country. In order to convince you that such is not the case I drop you a few lines, and give you the result of my observations while on a recent trip around the mountains.

After securely bolting and barring all the doors and windows of my stately mansion, I took up my line of march for a visit to some of our mining districts, which I had often heard of but never seen. Traveling along the low foot-hills, covered with sage brush and greasewood, with here and there a scrub cedar, I pursued my course, crossing Coyote and Star Creeks, leaving Star City to my left, and finally reached the flourishing village of Santa Clara, where I found my friend A. J. Simons, (one of Humboldt's Representatives in the Territorial Legislature,) with his feet elevated considerable higher than his head, and dividing his time between Blackstone and a kettle of beans which he was cooking over a slow fire, evidently expecting the arrival of some hungry miner. I rather think he came to the conclusion, before I finished my dinner, that the aforesaid hungry individual had arrived.

Santa Clara is situated about fourteen miles north of Unionville, is a pleasant location for a town, has a very enterprising and industrious population, and some of the richest silver ledges in the range. Among the richest of them are the Magna Charta, Butte, Wyoming, Tehama, Kentucky, High Star, Accident No's. 1 and 2, Siskiyou, Last Chance, Yellow Jacket, and Twilight. The Magna Charta tunnel is in 240 feet, is now in the casing rock and within a few feet of the ledge. They have passed through several small veins or spurs which show very rich mineral. The tunnel is being run by two companies, the Lager Beer and Sparkling Wave, at right angles with the ledge. Two companies are located on the Butte ledge—the Tehama and Cherokee. Both companies have sunk shafts on their claims and have taken out some very rich rock. The Cherokee Co. are now running a tunnel, under the supervision of Adam Folk, to open the ledge at a depth of 200 feet. This company intend opening their claims this winter and erecting a mill early in the Spring. The Tehama Co. will take out quartz through their shaft for the present. Eight tons of this quartz was worked by the Cherokee Co. during the Summer, with an arrastra, without the silver process, and yielded a little upward of \$250 per ton, which has established the richness of the ledge beyond a doubt. This company recently sold 108 feet of their ledge for \$100 per foot. The ledge was discovered in September, 1861, by Jack Powers and A. J. Simons. The Wyoming tunnel is now in a little over one hundred feet and the work still progressing. The ledge has been thoroughly prospected from the surface, by a shaft, and the quartz has proved rich. The Tehama, Highton, Kentucky, and several other ledges in this district, are being prospected with tunnels, and promise equally well. The population of Santa Clara is about one hundred. There are four families in the place, and another is expected to arrive shortly.

After remaining over night in Santa Clara, and enjoying the hospitality of friend Simons, I crossed over the mountain, a distance of four miles, to Prince Royal, or Lassenville, which is a flourishing little mining camp, situated in a deep cañon on the west side of the mountain, and near the upper end of the range. There are about forty persons in

the district, and two families. This district has many rich ledges, the most noted of which are the Newton, King, Webster, Sallust, Coulthurst, Davis, Esop, Socrates, Keystone, Mark Anthony, Yankee Blade, Lassen and Prince Royal, which are all being prospected by tunnels. The Newton tunnel is in one hundred feet, is now very near the ledge, and has been cut through several small veins which are rich. The King tunnel is being run on the opposite side of the hill from the Newton, intending to intersect at the centre of the ridge. These tunnels, when completed, will be 800 feet in length and will open six ledges—the Newton, Sallust and Coulthurst on the east side, and Ring, Webster and Davis on the west. A tunnel is being run into Esop Hill, which will open three ledges—the Esop, Mark Anthony and Socrates. This tunnel is now in 85 feet. The Keystone tunnel is in 65 feet, has about 130 feet further to run, and when completed it will open three ledges—the Keystone, Yankee Blade and Lassen. The Prince Royal tunnel is in 65 feet and is very near the ledge. All of these ledges will be opened this coming winter, and Prince Royal District will be able to furnish quartz enough to keep several mills running next summer. The Louis Napoleon, Lincoln, Fort Pitt, Pennsylvania, Honey and Washington are all considered, first class ledges. Arrangements have been made to have a twelve stamp steam mill erected in this place early in the Spring. I must give Prince Royal District the credit of having done more toward developing the mines, in proportion to the number of inhabitants, than any other district in the range. I remained one day in Prince Royal District, and was well pleased with the indications.

After leaving Prince Royal, and traveling down the mountain four miles, in a westerly direction, I arrived at the oldest settled village in these mines—Humboldt City. This place is pleasantly situated, contains about sixty houses—some of which are fine ones—has a population of about one hundred and fifty, and seven families. The town does not appear to be very lively at present, as many of the miners have gone over to California to lay in their supplies for the winter. The ledges of this district are large, well defined, and full of mineral. Among the richest of them are the Cuba, Crittenden, Canada, Huntington, Louisiana, Humboldt, Cape Cod, Winnemucca, Melrose, Constant, Santa Anna, Mississippi, Florida, California and Cutler. The Cuba tunnel is now in one hundred and seventy-five feet; they are on the ledge, and taking out very rich rock. The Winnemucca is in 50 feet, and this company have just struck the ledge, and struck it rich. The Crittenden is in seventy-five feet, and the company have about twenty feet further to run. They have run through a spur of this ledge, two feet wide, which prospects very rich. The Canada has a shaft, 25 feet deep, sunk on the ledge. The Huntington tunnel is in 60 feet, and there are about 20 feet further to run. The Louisiana tunnel is in 125 feet. This company have not struck the ledge with the tunnel, but are taking out good rock through two shafts, which are now down 40 feet on the ledge. The Ed. Payne Co. have a shaft, 55 feet deep, sunk on the ledge. They have had to suspend the sinking of their shaft on account of water, and are going to commence a drain tunnel soon. The California Company have their tunnel in upward of 100 feet, and have about 25 feet further to run. Several other companies are running tunnels to open their ledges. Judge Horrell has the machinery for a steam mill on the road for this place. The mill is to be erected immediately. A company is about being organized for the purpose of conveying the water from Humboldt River in a canal 13 feet wide and 5 feet deep. The canal is to be  $2\frac{3}{4}$  miles in length, and a fall of 21 feet can be attained in that distance. This project, if carried out, will furnish an immense water power, affording fine facilities for working the ledges in this and Prince Royal District. I remained two days in Humboldt City, visited several of the tunnels, examined the ledges, and I am well satisfied as to their richness.

After leaving Humboldt City, I continued my course down the west side of the mountain for eight miles, journeying along the old emigrant road, where I traveled several years ago, when I was a poor, god-forsaken, barefoot emigrant, chock full of alkali. Little did I then think that my fortune and the fortunes of thousands, lay buried beneath the lofty mountain to my left. After crossing El Dorado and Spring Cañons, I commenced ascending the mountain. After pulling and tugging, sweating, panting and climbing for two

hours and a half, I reached the summit, where I had a fine view of Unionville and the surrounding country. I stopped on the summit for a short time, to rest and refresh myself, and then commenced descending. The descent is very steep, but I managed to make the trip down the mountain in much less time than it had taken me to ascend, and I soon found myself at "my own loved home," tired, foot-sore and hungry.

I regret not having had time to visit Star City, but I every day hear favorable accounts from this district. Star District has as many good ledges as any other district in the range, and has excellent water privileges, which is no small item in this country. Considerable improvement is going on in Star City in the way of building and opening ledges. The principal ledges in Star District are the Sheba, Franklin, Mammoth, Almo, San Barnard, Yankee, Slabtown, Arch, Mountain top Pines, Haviland and Jeff. Davis. Most of these ledges are being thoroughly prospected with tunnels, and with very flattering results. The Sheba, Franklin, Mammoth, Yankee, and several other companies, are working on their ledges and taking out large quantities of rich rock. Hoonfray's Mill is now in running order, and you may soon look for glorious accounts from Star.

Considerable work is being done in Indian, American, Sacramento, and Echo Districts, though not so much as in the other districts that I have mentioned; but all of them have very rich ledges, which, doubtless, will some day make millionaires of their owners. The Moonlight ledge, in the Indian District, is one of the richest in the range, and is now being successfully worked.

Last, though not least, I mention Buena Vista District, which has a large number of valuable ledges. The National, Alba Nueva, Downey, Comet, Empire, Mars, Lander, Golden Fleece, Eagle, Chameleon, Congress, Tom Moore, Jackson, Buckeye, Blue Bell, California, Keystone, St. Louis, Mary Ann, Mary Bell, Peru, Chile, Cass and Independence, all rank among first class ledges. The National, Alba Nueva, and Mars Companies have taken out a great many tons of quartz from ledges. The Peru, Eagle, Congress, Jackson, Buckeye, Keystone, Empire, and several other companies, are working on their ledges. The Adventurers' Company, on the Chameleon ledge, are going to open their claims this winter. The proprietors expect, when their claims are opened, to take out some of the richest rock ever found in the Territory.

Unionville is improving rapidly. It now has a population of about four hundred and fifty, about thirty families, a large number of fine buildings, and already has quite the appearance of a city. Fall & Co's mill will soon be in running order. We have a large school-house nearly completed, which will answer both for a school-house and a church. Its cost is about \$1,500, which was raised by contribution of our citizens.

A good many real and sham capitalists have visited our mines during the Summer and Fall. It is a difficult matter to distinguish the real from the sham. They are all known by their long linen coats, and it is generally supposed that he who wears the longest coat has the heaviest purse. It would astonish you to see what an affection some of the sharpers (who have feet to sell) have for the long coated gentry. But long coat tails are about played out, as some of our boys, in order to have a little fun of their own, have commenced putting on the long coats. Many of the aforesaid pretended capitalists are not on the buy, but are very anxious to have feet in good ledges given to them; and they are willing to pay for said feet by giving tone to the ledges they may be interested in. This dodge isn't exactly the thing, for, as a friend of mine very properly remarks, the miners have lived too long on sage brush and bunch grass, to dispose of their rich ledges in any such a manner. A party of San Francisco bloods—men of capital I am told—recently visited our mines, remained a day or two, and returned to San Francisco thoroughly disgusted with the country, pronounced the mines a complete humbug, and advised their friends not to invest in Humboldt stock. Now, I am informed by reliable parties that these heavy capitalists did not visit a single ledge, and no one could make them believe that there were any silver ledges here. Some of them inquired for timber and were told that there was plenty of it on the range of mountains east of this place; but they, like doubting Thomas, would not believe. You can see by the statement I have made, (and I am willing to be sworn as to its correctness,) that a very large number of ledges will soon be opened. Then we shall be under no necessity of seeking capitalists; they must seek us, and they will find us when they come down with the cash. We have quit running on shape.

The miners of Humboldt county are deserving of a great deal of credit for their energy and perseverance in developing so extensive a mineral country as this. Situated as they were without means, commanding scarcely any capital beyond their own labor, and being in a country where provisions of all kinds and mining tools were held at high figures, they have accomplished as much or more than any equal number of men ever did accomplish in the same length of time, and under such adverse circumstances. This may not be the opinion of some, who have not taken the trouble to investigate the matter but it is the opinion of

UNIONVILLE, N. T.

QUARTZ.



SAN FRANCISCO MINING NOTICES.

ASSESSMENTS LEVIED.

Assessments upon Mining Stocks have been levied as follows:—

Garabaldi.—Assessment of \$1 per share, levied March 1st.

Sutro.—Assessment of \$1 per share, levied Feb. 23, payable March 23.

Silver Quartz Mill Co.—Assessment of 5 percent, levied Feb. 23, payable March 28.

Helvetia.—Assessment of 25 cts. per share, levied Feb. 7, payable March 10.

Zouave.—Assessment of \$1 levied Feb. 22, payable March 10.

Rogers.—Assessment of \$5 per share levied Feb. 4, payable March 15.

Sau Wright.—Assessment of 50 cts. per share levied March, payable immediately, delinquents to be sold Apr. 2.

Napoleon (copper).—Assessments of \$3 per share levied Apr. 3, payable in 30 days.

Golden Age.—Assessment of one dollar per share levied Feb. 24, payable March 26.

Washoe Gold & Silver.—An assessment of 2 per cent. capital stock was levied Feb. 16, payable Apr. 1.

Rhodes' Diggings.—Assessment of 25 cts. per share levied Feb. 26, payable March 5.

Texas Co., at a Meeting held Feb. 14, levied an assessment of one dollar per share, payable to the Secretary in Virginia City.

Santa Rosa Co.—February assessment of 20 cents per share are now due and payable.

Madison Co.—An assessment, two dollars per share, was levied Feb. 17, payable immediately, at Office, 600 Merchant St.

Union Co.—An assessment of one dollar per share was levied February 16, payable on or before March 25.

Pena Co.—An assessment of \$3 per share was levied Feb. 5, one half payable March 1, balance April 15.

Kossuth Co., Devil's Gate District.—An assessment of 10 cts. per share was levied Feb. 7.

Constitution Company levied an assessment of 25 cts. per share, payable immediately.

La Plata Oro Co. levied an assessment of five dollars per share, Feb. 9, payable at Office of the Secretary in Virginia City.

La Plata Co. levied an assessment of 50 cts. per share Feb. 2nd, payable at Office of the President.

Alamo Co. levied an assessment of 50 cts. per share, Feb. 9, payable on or before March 20, at 115 Cal. Street San Francisco, or at office in Carson City.

Packer Co. levied an assessment of 25 cts. per share, Feb. 11, payable immediately at 608 Merchant St.

Tawley Co. levied an assessment of one dollar per share, Feb. 9, payable on or before March 12, to Superintendent at the mine, or Secretary at Office.

State Range Co. levied an assessment of 50 cts. per share, Feb. 4, payable, March 15.

Moss G. & S. M. Co.—An assessment of 50 cents per share was levied Jan. 27, payable at 428, Montgomery St., to the Superintendent at the mine.

White Cloud G. & S. M. Co. levied an assessment of 50 cts. per share, Jan. 27, payable to the Secretary, at 428, Montgomery St.

El Dorado G. & S. M. Co.—An assessment of One Dollar per share was levied Jan. 23, payable to the Sec. or to Supt.

Baudaloupe S. M. Co.—An assessment of \$30 per share was levied, payable on or before March 1st.

El Tesora Mining Co.—An assessment of \$1½ was levied Jan. 27, payable at office on or before Feb. 27.

Polar Star G. & S. M. Co. levied an assessment of 50 cents per share, February 4th, payable on or before the 4th of March, at the Office in this city or the Superintendent at the mine in Aurora, (Esmeralda.)

Dios Padre G. & S. M. Co. levied an assessment of 3 dollars per share, Jan. 31, payable in 30 days, also an assessment of 2 dollars per share, payable in 60 days, at office 502 Montgomery street.

Beckwith G. & S. Mining Co.—An assessment of 25 cts. per share was levied Jan. 24, payable immediately.

Sonora Mining Co.—An assessment of 25 cents per share was levied Jan 23, payable immediately.

Overman Mining Co.—25 cents per foot, Jan. 29, payable in ten days.

Chas. Caney Mining Co.—50 cents per share, Jan. 21, payable on or before Feb. 20th.

Sierra S. M. Co. An Assessment of \$2½ was levied Jan. 22—payable immediately, at Office 575 Mission St.

Mount David-on Co.—An Assessment of 50 cents per Share was levied, Jan. 23, payable on or before March 1st, at Office 47 Montgomery Block.

Admiral.—Fifty cents per share, payable at No. 4 Armory Hall, San Francisco, or to the Superintendent at the Mine.

Hattie G. & S. M. Co.—Thirty cents per share, levied Jan. 31, payable at Office in San Francisco, or at the Mine.

Hale & Noreoss.—Assessment of Ten Dollars per Share, levied Jan. 31—payable at the Office in this city, or to John Skae, at the Mine, on or before Feb. 25.

Minna Prieta S. M. Co.—An Assessment of Five Dollars per Share was levied, Jan. 31, payable on or before March 5th—at Office, cor. Montgomery & Jackson Sts.

GENERAL NOTICES.

Yellow Jacket.—Corporate Deed now ready for signature at office of H. G. Maynard, Gold Hill, N. T.

Jenny Lind (Esmeralda).—Owners of ground in this lot are requestes to call and sign deed of trust at 608 Merchans St.

Mount Hope Co.—Persons claiming stock are requested to present title papers for examination till March 16.

U. S. Mining Co.—All persons claiming stock are requested to present title papers for examination at Nos. 7 & 8 Government House.

Caution.—D. M. Tyrell warns persons against purchasing a certain 10 feet of ground in the Wellington Co., standing in the name of J. B. Magee—also 20 feet, standing in name of W. Williams. (See Territorial Enterprise.)

Ashland Co.—L. A. Gould, in the name of the Moss Co. notifies the Ashland Co. that their westerly drift has cut the Lamb ledge, in the Moss Co.'s ground, from which the Ashland Co. is forbidden to extract any valuable metals.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal. at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - ; - - - Proprietors.

Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOGRAPHY and ELECTROTYPING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and *four dollars, or two dollars* for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so for meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

THE SWEZEY Co., Gold Hill, give notice that Baltic Company have wrongfully claimed and worked their ground since July, 1860.

THE CHIMNEY ROCK Co., lying next west of the Virginia Co. claims have notified the Hazel Green, Tingley and Bach & Paxton Companies that they are trespassing upon the Chimney Rock Co.'s ground.

MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to last purpose, and of everything generally that may be of service to the Miner.

The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

Terms.

To mail subscribers:—Four Dollars per annum.

Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

DR. VAN ZANDT, Consulting Physician and Surgeon.

OFFICE:

Corner of Washington and Sansome Streets.

The Great Success of this Century, as an Aid to Practical Medicine.

The Mysterious Problem of Material Nature, Electricity! Made Subservient for the Cure of all Nervous and Spinal Diseases

THAT THIS PRINCIPLE, successfully applied to diseased states of the system, is to prove the great sought-for necessity, long wanting by physicians to aid their medicines in overcoming organic and functional derangements of the human body. It is a part of the great principle of vitality known as nervous influence and necessarily must have much to do in obviating diseased action.

Too Much Cannot Be Said

In its praise; for it is highly probable that in health there is an exact equilibrium of the ELECTRIC principle; and should this secret and hidden equipoise of health be broken or lowered—should the body be negatively electrified when it should be positively charged—is not the current broken, and is there not a war of forces going on in our system? This needs correcting, and in order that the tissues of the body should be susceptible to remedial agents we must first restore and

Awaken the Magnetic Life Within Us.

The spinal and sympathetic nerve systems. Believing as I do most firmly in this great magnetic or electrical intensity of the earth, with its influences upon our bodies in health and disease, I am led to take advantage of the press, through which to awaken attention to the subject, that good may come to all.

C. W. THOMAS, Plaining Mill, California street, facing the Mission R. R. Depot. San Francisco. m1

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts. m1

D. R. J. B. BEERS—Deputy, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner. ap16

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California. Virginia City, N. T. ny23

PALMER, HANSCOM & Co. Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market. ny23



## TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metaliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; that rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel, and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphuret ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

Our object is to furnish the miners of California with every class of information which shall be valuable to them in the progress of their calling and in the development of the mineral resources of the State, and we know of no way in which we can devote a portion of our time more to the interests of miners than in the manner here proposed. The only equivalent we ask is that they shall do what they reasonably can to sustain and improve the paper devoted exclusively to their interests.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles de-

scribing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector; and we have the promise also, at an early day—probably within a week or two—of a series of articles under the head of "THE MINER'S LABORATORY," which will be prepared especially for this paper by one of the most skillful metallurgists on this coast, and which will be found of great value to the mining public.

**A USEFUL INVENTION.**—By invitation of the inventor, Mr. ALFRED E. FRICK, one of the popular conductors of the Market Street Railroad, we recently examined, at his residence, near the Mission, a working model of a most useful and ingenious machine, which he has just perfected, and for which he has taken the necessary steps to secure a patent. This invention may be called a "packing machine," designed more especially for the putting up of small packages of coffee, spices, mustard, etc. It is most ingeniously constructed, compact and simple, yet so perfect and effective, that with it two boys can perform the labor of six men by the old hand process—and do it much better.

This machine is especially valuable for packing coffee for the reason that the pressure produced operates to so compress the grains of coffee (ground) as to almost entirely exclude the air from the package and thus preserve the aroma, which is the strength and real excellence of coffee. The packages, when filled, instead of being loosely tied with strings, are hermetically—or nearly so—sealed with paste. By this means, the bouquet of the coffee, instead of escaping through the folds of the paper, is preserved until the package is opened for use.

It is difficult to give a very intelligible description of the machine, without an illustration, but the reader may perhaps form some idea of it from the following: The coffee or other material to be packed is placed in a hopper from which it is distributed, through valves into three or more boxes, the exact size and shape of the package to be made, and into which the paper has first been placed. After the material has passed through the valves, they are closed and made to operate as levers or stamps; the boxes being placed on a table or platten below, and by a simple movement made to move up against them. The coffee, or other material is thus closely and neatly compressed. The inventor claims for his invention the following qualities: 1, economy of labor; 2, economy of packing material; 3, superiority of the article packed over the same quality of a similar article packed by the hand process.

**RAIN.**—Two inches of rain fell in San Francisco during the month of March, making the entire amount for the season thus far 11.78 inches. Last season the entire fall of rain here equalled 47.75 inches.

**SNOW.**—The amount of snow which fell this winter, up to March 1st, at Hermit's Valley, on the Big Tree road, near the summit, was 14 feet 7 inches. The amount that fell during the corresponding time last winter, was 52 feet.

**WHAT IT COSTS.**—It costs twenty dollars a ton for transportation of merchandise per hundred miles on an ordinary road, two dollars on a railroad, and twenty cents on the ocean, for the same distance.

**HALLIDIE & Co.**, of this city, have entered into a contract to erect a wire suspension bridge across the Frazer, about a mile from Chapman's Bar. It will be the first work of the kind constructed in British Columbia.

**SINGULAR.**—There is a plant growing in the springs of Iceland, which not only flowers but bears seed, in water hot enough to boil an egg. So says Ross Browne in one of his letters to Harper's Magazine.

**THE Donaghmore furnace**, in Lebanon, Col. Hammond, manager, has been in continued blast for four years and twenty-four days. Throughout that time it has averaged 119¾ tons of iron per week, and has consumed but 1¾ tons of coal in the production of a ton of iron. The Donaghmore is a twelve-foot furnace.

**PAINT TO ENDURE.**—It is said that boiling coal tar with slacked lime, will make a shining surface on woodwork, and walls of any kind, which is as imperishable as stone, and therefore valuable for out-houses, &c.

## NEW DISCOVERIES, ETC., IN THE VICINITY OF PLACERVILLE.

In November last we made mention of some recent gold discoveries near Poverty Point, in the vicinity of Placerville. The lapse of time since then has proved, most conclusively, that both Poverty Point and Poverty Bar, as applied to that locality, are misnomers—for this vicinity has now proved to be one of most extraordinary richness.

The New El Dorado Co., of which we made mention has since put up a small steam mill upon their vein, but were permitted to run it only long enough to develop a ledge of extraordinary richness, when an injunction was served upon their further operations, by another party who claimed priority of title. This suit is not yet finally decided, although the El Dorado Co. are confident of winning.

This mill has now been leased by Mr. A. F. Mitchel, of this city, who is quite extensively interested in valuable "feet" in that vicinity. Mr. M. will soon start up the mill, with rock from the claim adjoining the El Dorado. He will employ, as an adjunct to the stamps, a new process, which has recently been patented and perfected in this city, and which will be known as the "Norton & Eddy Electrical Process." This process is fully described, elsewhere in our columns to-day.

The New York Company, on the same lead, have just started a water-mill with the capacity for crushing 10 tons per day. They have sunk a shaft 45 feet deep and run a tunnel 60 feet, and are now taking out very rich rock. On the extreme northerly end of the El Dorado, a company has struck the continuation of that vein in a 14 foot shaft which shows very rich rock, carrying coarse gold.

A new lead has also been discovered, running parallel to the New York, and located by the American Co. An average lot of 480 lbs. of rock from this ledge worked in this city by the Norton and Eddy Process, yielded at the rate of \$78.85 per ton, carrying about six per cent. of silver. All of the rock in this vicinity yielded a small percentage of that metal, in connection with the gold.

A somewhat remarkable, yet most fortunate accident occurred, about three weeks since in the tunnel of the Poverty Point mill. A large slide occurred, which nearly destroyed the tunnel, and as it had not been paying anything of consequence for some time the company were about abandoning their ground, when, upon a more careful examination of the slide it was discovered that an entirely new vein had been exposed parallel to the old one, and only six feet distant from it. On further exploration this was found to be the true vein, about six feet thick. The company has now started in anew, with most encouraging promise, and high hopes of future success. A new ledge has also been recently opened near Chili Bar, in this vicinity, which presents every indication of proving rich. It is 15 feet thick. The company have taken up a water power upon which they propose erecting their mill.

The Pacific Quartz mill, which is located directly in the town of Placerville, has recently thrown away the arrastras, which they have heretofore used, and substituted in the stead pans—of whose patent we have not learned. We understand that the change has proved most satisfactory—their rock yielding by the new process nearly 50 per cent. more than they have heretofore obtained.

**A MINING ITEM FOR SMOKERS.**—Some five or six weeks since, ten individuals, belonging to the Dashaway Association of this city, all inveterate smokers, agreed to abstain from their favorite weed for a period of six months, and invest the usual expenditure for that luxury, in a common fund for their mutual benefit. In about one month this fund reached the amount of \$200. It was then resolved to invest that sum in mining stock. The "feet" were accordingly purchased, and one evening last week the announcement was made that their "stock" had advanced to \$500 in value.

The above item furnishes a striking evidence of the expensiveness of the habitual use of tobacco, and the great advantage of a judicious investment in mining stock.

**HUMBOLDT SALT.**—It has been ascertained, says the Virginia Union, that beneath the stratum of loose salt lately discovered in the Humboldt district, N. T., there is a bed of crystalized salt, ten feet thick. Pieces of this rock are is transparent and white as clean ice.



## GENERAL MINING STOCK REPORT.

## REPORT OF SALES

At the San Francisco Mining Stock Board,

For the week ending April 11th, 1863.

Names of Companies.	Total No. Shrs.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2450	—	—	2525	2400	—
Gould & Curry	4,500	4	500	3200	3200	—	3425	3400	3625
Central	1,800	12	300	—	—	—	—	—	—
California	3,800	12	300	—	—	—	—	—	—
Chollar	5,800	4	300	—	—	—	405	300	300
Potosi	2,800	2	400	427½	480	—	525	500	—
Hale & Norcross	8	9	500	840	—	—	—	—	—
Sierra Nevada	3,000	1	300	61	70	—	65	—	65
Daney	8,000	4	500	—	310	—	250	—	—
Burning Moscow	4,800	2	100	142½	150	—	175	162½	170
North Potosi	2,000	1	300	26	—	—	30	32	35
Ross, F. D.	3,000	1	250	—	—	—	—	—	13
Marquette	7,200	2	125	—	—	—	—	—	—
Charles Caney	1,800	1	30	—	80	—	90	85	97½
Sacramento	1,800	1	500	—	—	—	—	—	—
Enterprise	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	1600	1750	—	1695	1650	1700
Iowa	—	—	—	—	—	—	—	—	60
El Dorado	—	—	—	55	62	—	67½	66	70
Norton	1,000	1	—	22	24	—	18	20	18
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	36	39	—	38	36	40
Adriatic	—	—	—	8	13	—	12½	10	10
Gold Hill Tunnel	—	—	—	—	5½	—	5½	5½	5½
Mount Davidson	10,000	3	200	—	0¾	—	6	6½	6
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	4	60	420	400	—	392½	390	385
White West	1,200	1	500	—	355	—	—	340	322
Antelope	2,000	1	500	—	—	—	—	—	—
Esmeralda	1,000	1	1000	47½	50	—	48	48	—
Real Del Monte	4,400	1	400	150	—	—	—	125	150
Elina	1,200	1	100	—	6	—	—	6	8
El Dorado	—	—	—	100	—	—	90	90	60
Silver Hill	3,000	1	—	64	54	—	50	50	50
Nevada	—	—	—	17	26	—	30	30	20
<b>COSO STOCKS.</b>									
Josephine	—	—	—	27½	27	—	25	25	24
Yolo	—	—	—	—	—	—	—	—	—
Willow Springs	—	—	—	—	12	—	—	15	18½
<b>MEXICAN MINES.</b>									
Mina Prieta	—	—	—	—	—	—	—	—	—
Mos Padro	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	—	—	—	—	22	—	24	22½	26½
California	—	—	—	—	—	—	—	—	—
Laurel Hill	—	—	—	—	—	—	—	10	11½
Utica	—	—	—	—	—	—	—	—	—

## REMARKS.

A greater firmness and better feeling has pervaded the mining market during the past week than ever before. The transactions have also been quite as heavy and numerous as during any previous week. Both speculation and a desire for personal investment have influenced movements, and a material advance in stocks has been the general result. As an evidence of increased activity in the market and the growing interest which capitalists are taking therein, we may instance the significant fact that the Exchange Board have recently increased the admission fee from \$500 to 1000 without producing any perceptible decrease in the number of applicants.

In Ophir but little has been done, one transaction only having taken place, in which 5 feet changed hands at \$2400 br. 30 days. This company paid a dividend of \$48 per foot, on Wednesday last. They have just made the last payment of \$25,000 on account of the Virginia purchase, and now, being out of debt, and the mine in good working order, it may be presumed that their next dividend will come up to former figures, with a material advance in their stock.

Gould & Curry. The marvelously rich strike recently made in this company's mine has created an unusual demand for its stock during the week. The market for the week opened at \$3200 and steadily advanced to a closing price of \$3650 cash and \$3900 on 90 days. The developments alluded to were made in a new shaft 15 feet below the present working, from which was taken about half a ton of native silver, estimated to be worth some \$10,000! Further important developments are looked for by holders of stock, with so much confidence, that it is difficult at this writing to find sellers at any reasonable price.

Savage has also come in for an unusual share of favor. The report during the early part of the week that they had "struck it rich" at the mine, and the effect to advance the price of shares some \$400 over quotations of last week. This stock may be quoted now at \$1700 at 1800.

Hale & Norcross. In consequence of the happy hit in the Savage, the Hale & Norcross, which is the next location on the same ledge, was considerably enquired for, but without any very material advance over previous quotations.

The Daney has been quite active during the week, and is much sought after. About 1600 shares (400 ft.) have changed hands at rates materially advanced over previous quotations. The new mill of this company has gone into operation. The result of the first week's crushing was \$10,000 from 150 tons of rock. The second "clean up" has just been reported, with a very material improvement in yield. "90 tons yielding \$21,000" is reported. A fine streak of ore "spotted" with native silver, is said to have been struck within a few days at the mine. The Daney bids fair to prove a very valuable mine. The flattering results above noted, are attracting much attention to it.

ESMERALDA MINES.—The especial interest attached to the recent important developments at Virginia City, appear, for the time being, to have drawn off attention somewhat from the Esmeralda mines. From the local papers there, however, and from private information we learn that most active efforts are now being made to properly develop the mineral resources of that locality, as well as the region still below, on the Eastern Slope.

We append our usual record of transactions, and reports of interior Mining Markets.]

## TRANSACTIONS IN SHARES, FOR THE WEEK.

## NEVADA STOCKS.

Ophir—60 at \$2490, br 30 d. Gould & Curry—4 at \$3000  
Potosi—13 from \$400 (a 500; 5 at 550, br 10 ds.  
Chollar—20 at \$450; 52 at 405; 385 at 405 (a 475.  
Chs. Caney—5 at \$80; 5 at 82½; 20 at 90; 6 at 97½.  
Burning Moscow—20 at \$140, br 30 ds.; 94 at 152½; 20 at 151; 10 at 150; 10 at 145; 120 at 200, br 30 ds.; 10 at 172½; 20 at 185; 20 at 165; 104 at 160; 30 at 170; 106 at 200, br 30 ds; 28 at 180; 20 at 170; 20 at 190, br 30 ds.  
Lady Bryan—20 at \$17; 200 at 20, br 30 ds.; 50 at 13, br 30 ds.; 100 at 16, br 30 ds; 100 at 15½, br 30 ds; 210 at 15, br 30 ds.

Adriatic—20 at \$8½; 40 at 13; 20 at 12; 120 at 12½; 4 at 10; 30 at 19; 10 at 14.

Burnside—30 at \$50; 10 at 38; 10 a 37½; 10 at 37; 20 at 40.

Nevada—20 at \$25; 16 at 37½; 16 at 35; 10 at 40.  
Savage—5 at \$1775, b. 30 ds.; 5 at 1695; 5 at 1750, s 30 ds.

Desert—10 at \$5; 25 at 6½; 35 at 5¾.  
Reese River—175 at \$6; 200 at 6½, br 30 ds; 35 at 6½.  
Laurel Hill—40 at \$10; 25 at 12½.

Sierra Nevada—30 at 70, br 30 ds; 15 at 70; 45 at 70, br 30 ds.; 20 at 75, br 30 ds.

Iowa—5 at 97½. Sheba—15 at \$175.  
Norton 10 at 23; 5 at 24; 20 at 22½; 50 at 20.

Hale & Norcross—10 at \$850; 10 at 900, br 30 ds; 10 at 875, br 30 ds. Gen. Grant—50 at \$110.

Yellow Jacket—5 at \$350; 5 at 375.  
Moss—10 at \$19. Utah, F. D.—10 at \$1¾.

Cedar Hill Tunnel—27 at \$6; 100 at 5½.  
Daney—40 at \$300; 20 at 350, br 30 ds; 100 at 310; 36 at 300; 8 at 302½.

El Dorado—30 at \$75, br 30 ds. 20 at 70, br 30 ds.  
Hazel Green—20 at \$7½. Federal Hope—50 at \$5 ½.

Mount Davidson—5 at \$6½; 50 at 6.  
Union, Russ District—100 at \$3.

## ESMERALDA STOCKS.

Wide West—2 at \$422½; 10 at 408; 5 at 400; 25 at 405 br 30 ds. Golden Cross—20 at \$20.

Antelope—15 at \$400, br 30 ds; 15 at 375; 5 at 370; 5 at 375; 5 at 322½. Gen. Jackson—1 at \$10.

Esmeralda—5 at \$55, s at 30 ds; 5 at 52½, s 30 ds; 40 at 52, s 30 ds; 5 at 50. Luke View—100 at \$2½.

Bamboo—15 at 50, br 30 ds; 10 at 50, br 40 ds; 38 at 50 br 60 ds. Actna—20 at \$6.

Silver Hill—32 at \$54; 10 at 50; 10 at 50½.  
Pond—2 at \$130; 10 at 125; 19 at 140, br 60 ds; 29 at 115 North Esmeralda—100 at \$5.

## COSO STOCKS.

Josephine—174 at 57½; 50 at 31, br 60 ds.; 40 at 28½; 10 at 27; 66 at 26½; 16 at 26. Willow Springs—10 at 14.

## COPPER STOCKS.

Napoleon—100 at 35, br 30 ds; 25 at 26½.

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Friday, April 9.

Bid.	Ask'd	Bid	Ask'd
<b>Virginia Mining District.</b>			
Shamrock	—	—	—
Texas	—	8	10
Union (Virginia District)	—	—	—
U. S. Tunnel	5	8	—
Calhoun	—	52½	60
Old Virginia	—	10	—
Washington	—	12	—
York	5	7	—
Zouave	—	17	20
<b>Gold Hill District.</b>			
Baltic	—	16	20
Bunker (consolidated)	—	40	—
Bunker	—	15	—
Branch Mint	—	7	—
Cassiopeia	—	14	20
Dana	—	2	3½
Eureka	—	30	40
Golden Gate	—	—	—
Golden Eagle	—	12	—
Hawkeye	—	100	150
Koh-i-noor	—	30	—
Leona	—	21	—
Laboring	—	20	—
Mary Ann	—	7	12
North American	—	6	—
North Ophir (nominal)	—	—	—
Oriental	—	40	—
Princess	—	17	—
Sinclair	—	—	—
Swezey	—	22	—
Sierra	—	275	350
Yellow Jacket	—	15	25
Yolo	—	—	—
<b>Devil's Gate District.</b>			
Governor	—	8	9
Hawley	—	7	—
Monterey	—	100	125
Pride of the West	—	100	—
Whimwee	—	10	—
Wide West	—	—	—
<b>Flowerly District.</b>			
Atwill	—	7	10
Adriatic	—	15	20
Lady Bryan	—	5	6
Harrison	—	—	—
Uncle Sam	—	—	—

## WASHOE STOCK REMARKS.

For the week ending April 4th, 1863.

[COMPILED FROM THE DAILY TERRITORIAL ENTERPRISE.]

The business of the past week foots up somewhat less, in the aggregate than the transactions of the last, but a fair amount of dealing is reported. Although considerable fluctuation has occurred, the general tendency of stocks is upward, and the market gives promise of continued improvement.

Burning Moscow is still fluctuating, and may be quoted at \$130 at 140. Sacramento has declined somewhat during the week, and may be quoted to-day at \$60 at 62½.

Utah has advanced \$10 and is selling at \$52 and \$55. Work is about being commenced on the mine.

Allen is maintained at \$65 and \$70, with but little stock in the market. Burnside has declined somewhat, and may now be quoted at \$40 to \$45. Potosi is advancing, and is in demand at \$375 at \$400, with little offering. Moray has been in request at \$30 and \$35, with plenty of buyers.

La Crosse is still without demand, and is in the market at \$10 and 14. Belvidere is firm and saleable at \$20, with little in market.

Cole is in request at \$15 for large lots, although the dealing in it during the week has been light.

Monte Cristo after a long quiet, is in request again, \$15 being bid.

Madison is offered at \$18 to 20, without buyers. It may be quoted at \$15. Texas is advancing slowly, and may be quoted at \$8 and 9, with a fair demand.

In Gold Hill an advance is observable and considerable business has been done in shares. Overman is saleable at \$45, and is rapidly changing hands.

Belcher is firm, at \$125 and 160. Koh-i-noor is firmly held at about the same figures. The ledge in controversy by these companies is one of the best in the Territory.

The Eureka was maintained at \$35 and 40 until to-day, when developments suddenly advanced it to \$50 and 55. Such is the report from Gold Hill.

Dunn has declined to \$4 at 5, but shows symptoms of a rally. Princess and Bullion remain at about \$40 and 45.

Buchanan is saleable at \$160 and 175.

The leading feature of Saturday was the developments in the Savage. On Friday one of the very richest character was struck, and brought to the surface Saturday. It is equal to the No. 1 rock of the Gould & Curry, which it very much resembles. The result has been an advance to about \$2,000.

Santa Rita is in the market at \$60 at 65. There is something of a disposition to deal in it at lower figures, but it is held firmly.

Birdsall is marketable at \$40 at 42 50, with an upward tendency. It is in the market in small lots at \$45.

Milton is quotable at \$30 at 35, although it is sparingly dealt in at these figures.

Pride of Washoe is offered at \$35, without bidders. It cannot be quoted at more than \$30.

Osceola may be quoted at \$9 at 10, with some request.

We quote Hazel Green at \$5, Bloomingdale at 5 at 6, York at 5, Allen at 60, Recorder at 20.

Yellow Jacket is offered at \$325 at 350, without takers.

Union is offered at \$50, in small lots. It may be quoted at \$45 at 50.

We quote Galeadonia at \$15; Baltic at 16 at 18; Leon at 20; Yolo at \$15 at \$18.

Best & Belcher is being dealt in to some extent.

Beach & Paxton is attracting considerable attention from the great width and favorable appearance of its ledge. For 50 feet \$235 was offered to-day, without sellers.

Keystone-Nebraska is being dealt in at \$10 at 12, with something of a demand.

20 feet Sacramento sold to day at \$62.

## ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

	Bid.	Asked		Bid	Ask'd
Amador	—	5	Heath	\$10	12
Atlantic	2	5	Herman Consul	—	15
Arcade	6	10	Horne Check	—	5
Artelope	—	375	Ivve Yankee	15	—
Attarus	15	—	Lord Byron	7	—
Atua	5	—	La Plata	10	12
Brazo	5	10	Main Esmeralda	55	—
Bodie Bull Consolidation	—	—	Monroe	8½	—
Bright Star	15	—	Hickman Tunnel Co.	3	—
Bunker	—	—	Mount Bailey	3	3
Bullion (Van Horn Dist.)	—	10	New Esmeralda Consul	6½	12
Bodie Bull, No. 1	—	18	Newton	50	—
Bodie Bull, No. 2	—	16	Nevada	—	—
Bunker Hill	12½	14	Nevada Tunnel Co.	1000	—
Chimney	—	12	Old Winnemucca	10	12
Chidahu	—	25	Pack Tunnel Co.	2	—
Cape	—	5	Pacific	5	10
Del Monte	120	130	Pond	—	175
Dargun	—	9	Pride of Autelope	—	5
Delta	—	10	Peru (two f. to the share)	8	10
East Essex Ex. Urul	—	10	Real Del Monte	90	—
Empire	—	28	Strawberry	20	—
Fallstaff	—	5	Silver Hill	—	60
Fallstaff, Consolidation	—	4	St. Louis	—	5
Fresno	—	9	Tiger	—	3
Falls of Clyde	—	4	Union Tunnel	—	30
Great Eastern	—	1	Utah	—	120
General Hooker (Con.)	20	30	Union Tunnel	—	30
General Jackson	13½	14	Ural proper	—	500
Garibaldi	—	50	Ural (extension)	—	10
Golden Harvest	—	5	Union Tell	—	2½
Golden Cross	—	25	Wild West	400	10
Golden Age	—	20	X-Eliza and Constantine	—	—
Gran	—	12	consolidated	1½	—
Howard Tunnel	—	3			



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value	shrs per foot.	ass'ts to date	Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value	shrs per foot.	ass'ts to date
RUTH WINDSOR TUNNEL CO.	Esmeralda District	T. L. Bibbins	305 Montgomery st	\$100,000	\$100	1	\$	MORAVE G. S. & Copper	La Paz, Colorado.	G. J. Turner	608 Montgomery st	\$250,000	\$250		\$
ANTHONY SPUR, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	400,000	500	1	none	BLAKE RIDGE MINING CO.	Slate Range.	G. J. Turner	608 Montgomery st	240,000	100	3 ft	
JEFFERSON, G. & S.	Gold Flat Nevada Co.	T. L. Bibbins	305 Montgomery st	600,000	500	1	none	MADISON, SLATE RANGE	Slate Range.	G. J. Turner	608 Montgomery st	364,500	100	2 ft	
COOK, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	none	SAN FRANCISCO SLATE RANGE	Slate Range.	G. J. Turner	608 Montgomery st	210,000	100	2 ft	
CEDAR, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	none	CATYGA MINING CO.	Slate Range.	G. J. Turner	608 Montgomery st	195,000	100	2 ft	
SOTO GAMB, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	140,000	100	1	none	TRUINION, S.	Virginia District.	N. Shiverick	Mer. st. Mtgy bldg	600,000	500	1	15,000
SENECA, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	none	COLE, W. E. Wood	1223 California st.	1,500,000	500	1	2,200		
RED WHITE & BLUE G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	600	HAWLEY, G. & S.	Devil's Gate Dist.	C. Stevens	6 Parrots Building	880,000	400	1	1
LILLY OF THE WEST G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	140,000	100	1	none	PEYTONA, G. & S.	Virginia Dist.	C. Stevens	6 Parrots Building	100,000	100	1	1
ESBICK, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	none	CLEAR CREEK, G. & S.	Eagle & Washo dis	C. Stevens	6 Parrots Building	1,100,000	500	1	none
BULLION, G. & S.	Van Horn District	T. L. Bibbins	305 Montgomery st	120,000	100	1	none	MADISON, S. & S.	Esmeralda District	E. H. Wetherman	618 Merchant str.	240,000	100	1	none
LATHRILL HILL Mining Co.	Teahupoo County	C. S. Higgins	305 Montgomery st	300,000	100	1	none	UNION, G. & S.	Esmeralda District	E. H. Wetherman	Cashier Custom H.	600,000	500	1	none
UNION, G. & S.	Russ District	C. S. Higgins	410 Montgomery st	1,620,000	100	1	290	RAHVES DIGGINGS Q.M. Co.	Sacramento County	G. W. Touchard	414 Montgomery st	570,000	400	1	2,250
COMBINATION, G. & S.	Telescope District	C. S. Higgins	410 Montgomery st	990,000	50	2	5,275	SAN WRIGHT, G. & S.	Aurora, Mono Co.	E. Worth	547 Washington st	700,000	500	1	700
BULLION, G. & S.	Russ District	C. S. Higgins	410 Montgomery st	400,000	50	2	1,700	ST. CLAIR, G. & S.	Aurora, Mono Co.	E. Worth	547 Washington st	120,000	200	1	none
WHITE & MURPHY, G. & S.	Virginia District	J. P. Nourse	Lucas & Turners bldg	126,000	500	2	23,000	FEDERAL UNION, G. & S.	Aurora, Mono Co.	J. F. Bailey	40 Montgomery Bldg	300,000	500	1	600
MINNA PRISTA, G. & S.	Sonora, Mexico	J. P. Nourse	Lucas & Turners bldg	2,200,000	100	1	68,000	JOSEPHINE, G. & S.	Coso District	W. W. Lawton	Stevenson House	1,200,000	250	1	200
BURNING MOSCOW, G. & S.	Virginia District	J. P. Nourse	Lucas & Turners bldg	450,000	100	2	45,000	JEWELL, G. & S.	Devil's Gate	John Armstrong	610 Merchant st.	120,000	200	1	1,550
BUCKEYE, G. & S.	Virginia District	R. L. Taylor	612 Washington st	180,000	100	1	3,200	NEVADA COPPER MFG. CO.	Nevada, Mex. Co.	John Armstrong	610 merchant str.	240,000	200	2	none
AMERICAN, G. & S.	Slate Range District	A. H. Clark	522 Washington st	105,000	500	1	1,050	CINCO SEÑORES, G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	80,000	50	1	none
FRANCES, G. & S.	Slate Range District	A. H. Clark	522 Washington st	1,050,000	500	1	1,050	THUNDERBOLT, G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	50,000	50	1	none
SLATE RANGE, G. & S.	Slate Range District	A. H. Clark	522 Washington st	315,000	150	1	none	SAN JACOB, G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	100,000	100	1	none
ROCHESTER, G. & S.	Slate Range District	A. H. Clark	522 Washington st	815,000	150	1	none	FULTON, G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	100,000	100	1	none
PALADESBERIA, G. & S.	Slate Range District	A. H. Clark	522 Washington st	315,000	150	1	none	Kohler Bros's, G. & S.	San Antonio, L. C.	Kohler Bros's	Sansome street.	24,000	100	1	none
NEW YORK, G. & S.	Slate Range District	A. H. Clark	522 Washington st	315,000	150	1	none	LUCERNE MINING CO.	Gold Hill District	E. S. Paxton	712 Montgomery Bldg	2,000,000	200	44 in	29,500
CATARAUGUS, G. & S.	Slate Range District	A. H. Clark	522 Washington st	315,000	150	1	4,200	Mount Davidson G. & S.	Virginia District	E. B. Holmes	712 Montgomery Bldg	900,000	150	2	2,750
ALBANY, G. & S.	Flowers District	J. F. Bailey	40 Montgomery Bldg	500,000	100	1	none	Meredith, G. & S.	Coso District	E. B. Holmes	712 Montgomery Bldg	450,000	100	1	2,750
LADY BRYAN, G. & S.	Flowers District	David Wilder	522 Washington st	440,000	150	1	5,000	PIONEER COSO, G. & S.	Coso District	E. B. Holmes	616 merchant str.	660,000	100	1	none
DESERT M. Co., G. & S.	Flowers District	S. R. Roomey	7 & 8 Gov't House	270,000	100	1	600	Mauzanillo, G. & S.	Sinaloa, Mexico	R. T. C. Page	428 Montgomery st.	600,000	500	1	none
ADRIATIC, G. & S.	Humboldt, N. Ter.	J. H. Gager	Merch st, mt bldg	120,000	100	1	600	Moss, G. & S.	Virginia District	P. B. Cornwall	608 merchant str.	800,000	500	1	none
EVERETT, G. & S.	Humboldt, N. Ter.	J. H. Gager	Merch st, mt bldg	440,000	100	1	60	Madison, G. & S.	Esmeralda District	P. B. Cornwall	608 merchant str.	150,000	100	1	none
NORTH STAR, G. & S.	Silver Mtn. Mono.	J. H. Gager	Merch st, mt bldg	200,000	100	1	60	ST. UTH, G. & S.	Calaveras County	L. Francioni	Lucas & Turner bldg	400,000	50	18 in	8,000
CHRYSOPELUS, G. & S.	Humboldt dis. n. t.	J. H. Gager	Merch st, mt bldg	300,000	100	1	1,380	Melones & Stanislaus Co.	Alameda County	L. Francioni	Lucas & Turner bldg	150,000	100	1	none
ESTRELLA DEL MONTE, S.	Humboldt dis. n. t.	J. H. Gager	Merch st, mt bldg	180,000	210	1	1,380	Alameda Coal Min'g Co.	Alameda County	J. C. L. Wadsworth	Lucas & Turner bldg	2,400,000	500	1	450
MAINTAIN, G. & S.	Gopher, Calaveras Co.	J. H. Gager	Merch st, mt bldg	262,000	600	1	none	GOULD & CURRY, G. & S.	Humboldt Nev. Ter.	L. Francioni	Lucas & Turner bldg	180,000	100	1	450
LIVE OAK COPPER, M. Co.	Humboldt, N. Ter.	J. H. Gager	Merch st, mt bldg	600,000	500	1	none	Kate, G. & S.	Humboldt Nev. Ter.	L. Francioni	Lucas & Turner bldg	180,000	100	1	450
OCCIDENTAL, G. & S.	Emma Francis dis.	J. H. Gager	Merch st, mt bldg	245,000	100	1	70	Hope, G. & S.	Humboldt Nev. Ter.	L. Francioni	Lucas & Turner bldg	180,000	100	1	450
ANNIE LAURA, G. & S.	Humboldt District	J. H. Gager	Merch st, mt bldg	600,000	500	1	none	Opbir, G. & S.	Virginia District	Thos J. Lamb	Lucas & Turner bldg	5,000,000	300	12 in	none
STARLIGHT, G. & S.	Humboldt District	J. H. Gager	Merch st, mt bldg	570,000	100	1	none	Santiago, G. & S.	Silver City District	E. A. Breed	Lucas & Turner bldg	2,800,000	1000	1	none
ATNA, G. & S.	Esmeralda District	William Winchester	Aurora, Mono Co.	120,000	100	1	none	Noble Copper Min. Co.	Calaveras county	E. A. Breed	Lucas & Turner bldg	1,100,000	500	1	none
ALHAMBRA, G. & S.	Devil's Gate Dist.	O. Strauch	815 Sansome street	1,300,000	500	1	14,300	North Potosi, G. & S.	Virginia District	E. J. Joyce	Lucas & Turner bldg	650,000	100	1	2,600
WIDE WEST, G. & S.	Esmeralda District	S. P. Patee	522 Montgomery st	1,760,000	400	1	6,400	Normal, G. & S.	Virginia District	J. H. Brewer	40 Montgomery Bldg	180,000	100	1	none
REAL DEL MONTE, CONS.	Esmeralda District	S. P. Patee	522 Montgomery st	900,000	500	1	13,200	SIERRA NEVADA, G. & S.	Virginia District	J. H. Brewer	40 Montgomery Bldg	1,500,000	500	1	110,000
ESMERALDA MINING CO.	Esmeralda District	S. P. Patee	522 Montgomery st	1,600,000	500	1	6,750	Early Dawn, G. & S.	Devil's Gate Dist.	J. H. Brewer	40 Montgomery Bldg	200,000	250	1	none
ESMERALDA, N. EXTENS'D	Esmeralda District	S. P. Patee	522 Montgomery st	1,600,000	500	1	6,750	Porter, G. & S.	Lower Ledge	R. C. Page	420 Montgomery st	300,000	500	1	12,000
SILVER HILL, Consolid'd	Esmeralda District	S. P. Patee	522 Montgomery st	600,000	500	1	27,000	Scorpion, G. & S.	Star District	W. H. Martin	617 Clay street.	400,000	100	2	10
ANTHONY, G. & S.	Silver City District	J. F. Pope	115 California st.	200,000	100	1	47,500	Ruby, G. & S.	Silver City	W. H. Martin	617 Clay street.	120,000	100	2	10
LOUISA, G. & S.	Flowers District	J. F. Pope	115 California st.	300,000	100	1	1,500	Silver City, G. & S.	Silver City	O. Kison, Jr.	Cor. Bat & Bush st	1,000,000	100	1	12,000
ROGERS, G. & S.	Devil's Gate Dist.	J. F. Pope	115 California st.	300,000	100	1	1,500	Success, G. & S.	Gold Hill District	R. H. Waller	617 Montgomery Bldg	240,000	100	1	28,000
ALAMO, G. & S.	Lower California.	S. S. Sprague	Cor Cal & Sansome	72,000	500	1	8,400	Serra, G. & S.	Genoa District	S. J. Vandyke	127 Clay street.	500,000	300	1	28,000
BELLA VISTA, G. & S.	Virginia District	E. C. Lovell	712 Montgomery st	280,000	100	1	none	Silver City Q. Z. Mill Co.	Silver City	E. Bauer	414 Washington st	1,200,000	100	1	none
BURNSIDE, G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	800,000	400	1	15,600	Albion, G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	210,000	100	1	none
BARDER, G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	1000	1	15,600	Milwaukee, G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	270,000	100	1	none
IOWA, G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,250,000	500	1	15,600	Milwaukee, East, G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	180,000	100	1	none
LATROBE TUD & MFG CO.	Virginia District	R. N. Van Brunt	706 Montgomery st	80,000	50	1	15,600	Albany, East, G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	240,000	100	1	none
NORTON, G. & S.	Reese River District	R. N. Van Brunt	706 Montgomery st	1,200,000	1000	1	15,600	Mountain View, G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	240,000	100	1	none
RESE RIVER, G. & S.	Virginia, Mexico	R. N. Van Brunt	706 Montgomery st	264,000	90	1	17,900	Villanueva, G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	240,000	100	1	none
SAN MARCIAL, G. & S.	Virginia District	G. B. McAuey	712 Montgomery st	1,600,000	1000	1	10,000	Sacramento, E. G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	270,000	100	1	none
SAVAGE MINING CO.	Virginia District	D. W. Young	Cor Mont & Jckn.	1,080,000	300	13 ft	14,000	Santa Rosa, G. & S.	Virginia District	Nelson Hudson	Front street.	1,200,000	500	1	none
CALIFORNIA, G. & S.	Virginia District	G. B. McAuey	712 Montgomery st	540,000	300	13 ft	14,000	Sacramento, G. & S.	Virginia District	S. W. Moore	108 California st.	900,000	500	1	none
CEDRAL, G. & S.	Virginia District	G. B. McAuey	712 Montgomery st	540,000	300	13 ft	14,000	Willow Springs G. & S.	Coso District	J. H. Sayre	24 Montgomery st	270,000	100	1	none
CEDAR HILL M. & T. Co.	Virginia District	W. F. Farrington	509 Sacramento st	1,000,000	500	4	2,800	St Lewis, G. & S.	Esmeralda District	H. C. Chambers	22 merchant st	700,000	500	1	none
CHOLLAR, G. & S.	Silver City	W. E. Dean	53 Montgomery Block	350,000	250	1	10,000	Tesoro, G. & S.	Lower California.	H. C. Kibbe	Cor Sansome & Cal	540,000	100	1	none
CHENANGO, G. & S.	Devil's Gate Dist.	W. E. Dean	53 Montgomery Block	350,000	250	1	10,000	United States, G. & S.	Virginia District	S. R. Rooney	7 & 8 Gov't House	200,000	100	1	none
CROW POINT, G. & S.	Devil's Gate Dist.	W. E. Dean	53 Montgomery Block	350,000	250	1	10,000	Villanueva Mining Co.	Gold Hill District	J. R. Jennings	Cor mer & Mont st	240,000	100	1	none
CHARLES CABLE, G. & S.	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	3	Washoe, G. & S.	Esmeralda District	J. R. Jennings	Cor Jackson, Cor. Frit	1,000,000	500	1	none
CORCORAN, G. & S.	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	3	Coso, G. & S.	Coso District	E. W. Chambers	11 Court Block.	1,350,000	500	1	600
EMMETT, G. & S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	3	Prado of Esmeralda	Esmeralda District	J. F. Bailey	40 Montgomery Bldg	300,000	500	1	600
DOYLE, G. & S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	3	Ira G. S. Mining Co.	Russ District	David Wilder	522 Montgomery st	510,000	300	2	500
ISAACS, G. & S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	3	Table Mountain Cop. Co.	Calaveras County	M. G. Elmore	500 Montgomery st	787,000	250	1	1
KOHLER, G. & S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	3	Alusa G. S. M. Co.	P. R. dis. Humboldt	M. G. Elmore	500 Montgomery st	900,000	500	1	3
LIVINGSTON, G. & S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	3	Rip Van Winkle G. & S.	Esmeralda District	M. G. Elmore	500 Montgomery st	300,000	500	1	3
THOMAS, G. & S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	3	Schmelz, G. & S.	American dis. Humboldt	M. G. Elmore	500 Montgomery st	300,000	500	1	3
LA CRUYERAS Mining Co.	Mexico	Cor. J. K. & Frit	4 Armory Hall.	225,000	125	1	400	San Francisco G. & S.	San Francisco	M. G. Elmore	500 Montgomery st	1,400,000	500	1	420
DALE, G. & S.	Esmeralda District	Joseph R. Beard	4 Armory Hall.	1,600,000	200	1	400	Flowers Mill Company	Flowers District	James Peck	707 Sansome st.	100,000	100	1	none
LILLY DALE, G. & S.	Esmeralda District	Joseph R. Beard	4 Armory Hall.	240,000	300	1	400	Foundation M. & T. Co.	Esmeralda District	A. Davidson	Oakland.	300,0			







John R. Sims,



Oregon street, between Washington and Davis and Front and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and Shutters, Bank Vaults, Grating, Cemetery Railings.** All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch. Mr. Sims appreciates the past liberal patronage of his friends, and trusts that he may continue to merit it in the future. For the information of strangers he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attest. A large assortment of second hand shutters for sale at low rates. ap3

## WANTED, GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,

By FRONTIER A. DEVERCY,

13 ap 487 Pine street, San Francisco.

## New Patent Agency.

**WE HAVE CONNECTED WITH THE**  
Publication of the "MINING AND SCIENTIFIC PRESS"

### The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

#### Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at  
Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco. EWER & SMITH.

#### FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building.  
EWER & SMITH, Solicitors.

#### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate. EWER & SMITH.

#### PATENT RIGHTS.

**Patent Rights Bought and Sold,**  
At the office of the "Mining and Scientific Press" Agency.  
EWER & SMITH.

#### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

#### The Pacific Patent Agency

HAS BEEN REMOVED TO No. 625 Merchant street, to the office of  
WM. LOEWY, Esq., Attorney at Law.

#### MYERS & DAGGETT'S

**Mining and Stock Exchange,**  
No. 23½ B Street, Virginia City, N. T.

#### Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* \* Abstracts of Titles Furnished, Etc.

#### FREDERICK MANSELL,

**MECHANICAL & ARCHITECTURAL**

#### DRAUGHTSMAN,

No. 422 California street, corner of Leidesdorff.

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

#### P. M. STEAMSHIP COMPANY.

##### NOTICE.

Until further notice, the Steamers of  
Pacific Mail Steamship Company will hereafter be  
dispatched on the

3d, 13th and 23d of each month.

When any of the above dates fall on Sunday, the steam  
or will be dispatched on the following Monday.  
A. B. FORBES, Agent.

#### FULTON FOUNDRY & IRON WORKS

##### HINCKLEY & CO.,

MANUFACTURERS OF

### Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON  
FRONTS, FOR BUILDINGS, MINING PUMPS,  
AND ALL KINDS OF MACHINERY, ETC.,  
FIRST STREET,  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* \* All kinds of IRON and BRASS CASTINGS furnished  
at short notice. Every style of FINISHING to Iron when  
cast. Repairing of Machinery neatly done.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

#### TO OWNERS OF WATER-POWER

##### Beth's Hydraulic Pressure Wheel.

##### THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of  
fall, (3 feet to 300,) and to any kind of machinery, will  
Save in Transportation Material and Labor, from  
25 to 50 per cent. of the entire cost of the  
Structure to which it is applied, and proportionally  
increase its value.

For full information from the Inventor, apply at the  
Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan19-1f

#### Agency For Patents.

THE UNDERSIGNED having been long established in  
the Patent Agency Business, and having favorable  
arrangements for attending to the interests of inventors  
at the Patent Office in Washington, offer their services  
for the securing of Caveats and Patents also, will at-  
tend to the sales of Patent Rights, and to all matters  
connected with patented inventions.

WETHERED & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

#### REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

Real Estate Purchased and sold, and Loans Nego-  
ciated.

#### WHEELER'S

##### Amalgamating and Separating Pans.

It is acknowledged by all who have examined the prin-  
ciples and witnessed the operation of these Pans, that  
they are decidedly superior for triturating and amalga-  
mating purposes to any other in use.

The most important principle connected with the opera-  
tion of these Pans is the separation of the triturating  
process from that of extracting the amalgam from the  
sand. The chief cause of loss of the precious metals aris-  
es from the passing off of the same in combination with  
the quicksilver, during the process of triturating, and in  
cleaning up. By the introduction of the Separating Pan  
to follow the triturating this loss is entirely avoided. In  
working these machines there is no appreciable loss of  
quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated  
by the side of others on sands from the same vat, the  
Wheeler Pans have uniformly gained a large percentage  
of metals over its competitors, as well as a still larger  
percentage in the amount of work performed.

\* \* These Pans may be seen in daily operation, at the  
Miner's Foundry, on First street in this city, where all  
interested are invited to call and examine for themselves.  
no16-1f ZENAS WHEELER.

#### PEOPLE'S

### Steamship Line! CONNECTING CALIFORNIA AND NEW YORK, VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**  
J. H. BLETHEN.....COMMANDER.

Will be dispatched for

### San Juan del Sur,

From Mission street Wharf.

Punctually at 9 o'clock, A. M., on

WEDNESDAY, - - - APRIL 22, 1863.

Connecting at GREYTOWN with the Splendid Steamship  
ILLINOIS .....2500 Tons.

Reduced rates of Passage and quick trips are secured  
by the reopening of the Nicaragua Route.  
These Steamers are unsurpassed for speed, cleanliness  
and safety, and every effort will be made to insure the  
comfort of passengers.

For further information apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, opp. Post Office.

#### P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S  
line to PANAMA, connecting via the Panama Rail-  
road with the steamers of the Atlantic and Pacific  
Steamship Company at Aspinwall.

##### FOR PANAMA.

The following Steamships will be dispatched in the  
month of April, 1863.

April 13th, - - - - Steamer Golden Age.

April 22d, - - - - Steamer Sonora.

Will leave Folsom Street Wharf, with Passengers and  
Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with  
teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.  
je4 Corner of Sacramento and Leidesdorff sts.

#### Miners' Foundry

-AND-

### MACHINE WORKS,

First St., between Howard & Folsom,  
SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHI-  
nery, the Best and Most Economical, manufactured  
in the State of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalga-  
mators and Water Wheels—some in operation and on exhi-  
bition.

\* \* Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.

All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere.  
HOWLAND, ANGEL & KING.  
San Francisco, February 23, 1863.

#### DONAHUE'S

##### Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES,  
SAW AND GRIST MILL Machinery, Boilers,  
Quartz Stampers, Amalgamators, etc., etc., at reduced  
prices. Have now the largest and best assortment of  
Gear and Machinery Patterns in the State, a list of  
which will be forwarded to anyone desiring it, free of  
cost. PETER DONAHUE.

#### PALMER, HANSCOM & CO.,

### GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

### To Quartz Miners.

Knox's Improved  
AMALGAMATING PAN,  
WITH  
PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST  
complete amalgamation of the precious metals of  
any process now known.

By its use it is introduced in the most effective and eco-  
nomical manner, while it is peculiarly adapted to the  
catching of floating gold and silver, known to be other-  
wise lost. Made exclusively by  
PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

#### VULCAN IRON WORKS CO.

P. TORQUET.....MANAGER.

R. IVERS. C. R. STEIGER. S. AITKEN.

#### Steam Engine Builders,

Boiler Makers, Iron Founders and Gen-  
eral Engineers,

Nos. 137 & 139 FIRST STREET, - - - - SAN FRANCISCO.

STEAMBOAT MACHINERY built and repaired; also Saw,  
Flour and Quartz Mills, Pumping and Mining Machinery,  
etc., etc., etc.

Proprietors of Morse's Patent Fire Grates,  
JOYAL, FOURNEYTON and other Turbine Water Wheels  
with latest improvements.

#### DEETKEN'S

### Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

GOLD BEARING SULPHURETS WORKED AT REAS-  
ONABLE RATES: ALL THE GOLD EXTRACTED BY Chemi-  
cal process. Yield of Sulphurets from 30 to 50 per cent.  
higher than the BEST AMALGAMATION PROCESS.

\* \* Apparatus for separating Sulphurets set up by ex-  
perienced hands at a cost of \$50 to \$100, if desired by  
mill owners. No power nor clean water required for  
the purpose. nov8-3m

#### LEWIS COFFEY AND RISDON,

### STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

#### JAMES PHELAN,

(LATE J. & M. PHELAN.)

#### IMPORTER AND JOBBER,

### Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-1f.

#### THEODOR KALLENBERG

### Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophi-  
cal Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
San Francisco.



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, APRIL 20, 1863.

NO. 25.

## QUARTZ REDUCTION AND GOLD AMALGAMATING MACHINERY.

At no period in the history of mining has there been such an intelligent and practical application of inventive genius to mechanical contrivances for the reduction of quartz and the amalgamation of the precious metals as at the present time. An experience of twelve years in this branch of industry on a scale of magnitude without a parallel in either time or place has advanced Californians to the front rank of experimental miners; and at this time the miners of the old world—even the veterans of Cornwall and Wales are looking to California for the latest and most approved machinery in our peculiar speciality of extracting gold from its matrix. One of the most successful operators in the new gold fields in Wales, is a gentleman whose most important practical experience was obtained in the mines of California and Washoe.

In machinery for reducing quartz, we are fast narrowing down to a point. The numerous contrivances of mammoth "impingement" wheels, of ponderous rollers, cylinders, balls, etc., have all been cast aside forever, and there is every reason to believe that the few experiments which are now in progress will soon result in the adoption of a principle which, by common consent, will be recognised as the most economical and effective application of machinery to this purpose. If stamps are to be used, with the "wet process" triturating pans must come into invariable use, in connection with them. The experiments of the past two or three years have fully satisfied all practical miners that no "wet process," except grinding, will pulverise quartz to a sufficient degree of fineness to liberate anything like the entire amount of gold contained in the quartz, and every miner is also fully aware that any such process, by any machinery yet devised must necessarily be exceedingly slow.

Efforts are now being made to reach the required fineness by a direct process, and as to accomplish this the quartz must be reduced dry, a class of machinery has been introduced similar in its general construction to the "Smut Mills" in use in the wheat growing counties of the Eastern States, which admit of an upward discharge, that can be so regulated that none but the finest floating particles of dust can escape. One of these machines, the "Pond Crusher," manufactured at the Miners' Foundry, was recently illustrated in this paper. Another, now in use at the Pike's Peak mines, where it is known as the "Young America Quartz Crusher," instead of using revolving hammers, accomplishes the reduction by the simple velocity of its motion, the particles of quartz being struck are reduced to powder by "beaters," while suspended in the atmosphere. To accomplish this the beaters are made to move with a speed of from 12 to 15 hundred revolutions a minute. This latter machine has been constructed in this city by Goddard & Co., at whose foundry patterns of the same can be seen. It is claimed that by these machines the quartz may be crushed so fine as to need but very little reduction in the pans, which, indeed, need only be used as amalgamators. Both these machines are about to be submitted to practical tests on a large scale, the results of which will probably

fully develop their power, capacity and economy. Thus far their use has been mainly experimental, but with results which give much reason to hope for the eventual success of the principle. Of course we shall not fail to note any results for the benefit of our readers, as soon as they shall transpire.

Much progress has also been made in improving the "stamps." Probably the best stamp battery which has yet been constructed is that made in this city by Goddard & Co. It is made of wrought iron, durable, light, effective, and easily kept in order. The Ophir Company, at Washoe, has thoroughly tested the value and economy of this battery by working it in connection with the ordinary wooden stamps, and have decided to adopt it to the exclusion of the wooden ones. It discharges upon all sides, an arrangement which adds greatly to its effectiveness. This battery may be seen and examined at Goddard & Co's Foundry, on First Street in this city.

## OUR MECHANICAL INTERESTS.

The late extraordinary mineral developments on the Eastern Slope, the increased attention paid to the quartz mining interest, everywhere, throughout the State, and the renewed attention now being given to the mines of Sonora and Lower California, are adding vastly to the business of the Foundries and Machine Shops of this city, and to mechanical industry generally. The continuous demand for machinery for new mines, and for increase and renewal of machinery on old ones are compelling our foundries, in many cases to enlarge their area of business, and to add many additional hands and much machinery to their mechanical forces. Go where you may about the great work shops of this city, you will find evidences of most unparalleled prosperity meeting you upon every hand. The air of Front street and the lower portion of market, in particular, is resonant with the noisy din of the hammer and chisel of lath and anvil, while the sinews of iron and steel, moved by the untiring energy of steam, are constantly being brought into requisition as adjuncts to human labor. Thanks to the energy and enterprise of San Francisco mechanics and capitalists, our State is now fully redeemed from the thralldom of foreign dependence, and our miners and others are supplied with better machinery than could be obtained from the East, inasmuch as our mechanics and inventors have carefully studied and fully understand the peculiar necessities of the country.

A more intelligent and energetic class of mechanics cannot be found in the world than are now concentrated in this city. Being desirous to gain some idea of what is being done by our foundrymen and boiler makers, and make brief mention of the same in the columns of the Press, we took a hurried walk, a few days since through some of the principal shops, and were not a little astonished to note the magnitude to which this business had arrived within the last two or three years. The recent mining operations and undertakings on the Southern Coast have added vastly to the demands for machinery from our foundries and machine shops. No better idea of the magnitude and extent of this

new direction which is being given to our mining industry, can be formed, than by passing through six or eight of our principal foundries and noting the immense amount of machinery now being prepared for these mines.

These developments, though outside of the limits of the United States, are nevertheless as much conducive to the advancement and prosperity of this city as though the mines were located within the boundaries of California. All the wealth which they will create, all the commerce and industrial interest which they will call into life, will centre in San Francisco, and add directly or indirectly to the prosperity of each and all its inhabitants.

We propose to take up each foundry, separately, and endeavor to give our readers in future numbers, some idea of what is going on in these vast laboratories, where are concentrated the mechanical genius and skill of the Pacific Coast.

We regret that the limited extent of our columns will not admit of our devoting two or three pages in each issue of the Press, to the benefit of our mechanical interests. But we cannot do so at present. We hope ere long, however, to be able to enlarge the dimensions of our sheet to double its present size, when, in addition to our mining department, which will continue to form the leading feature of the paper, we propose to make the Press also the exponent of the mechanical interest of the State—in short, we aim to make it the "Scientific American" of the Pacific Coast. This is the plan we have marked out, and to this end we solicit the active co-operation of these two great industrial interests, fully aware that it is only by their aid and favor that we can achieve the success to which our ambition aspires. Thus far our progress has been flattering, and we have been greeted with many acts and words of encouragement.

**SANBORN ON COPPER.**—We are desirous to either purchase, or obtain the loan, for a few days, of a work entitled "Sanborn on Copper." Any person having said work will confer a great favor by forwarding the same to this office. We are unable to find the work in any of the bookstores or libraries of the city. Although several copies have recently been sold by Bancroft & Co.

**OPHIR MINING COMPANY.**—C. W. Lightner, late Superintendent of the Sacramento Gas Company, has been elected President of the Ophir Mining Company, *vice* J. W. White, deceased. The Office of this Company has been removed to Room No. 1, Express Building, Montgomery Street.

**OUR MINING LIST** is still increasing. We shall continue its weekly publication a short time longer, after which we propose to confine its issue to monthly terms. The frequent changes of the Offices and Secretaries of the various Companies render its permanent issue, in pamphlet form, as has been several times suggested to us, of no practical value. In a short time after its issuance in pamphlet, it would be as likely to mislead as otherwise. Our readers will find it of much more value in its present shape, corrected at regular intervals.



## THE HUMBOLDT MINES.

UNIONVILLE, MARCH 25, 1863.

MR. EDITOR: Perhaps a few lines about our country would not be amiss. We have cold airy weather and the mountains are covered with snow, but nothing hinders the sturdy, industrious miner from driving his tunnel. Ere long we will astonish the world with our rich mineral. A few Californians, with small capital have arrived among us and some purchases have been made. I will now give you the names, prospects, and amount of labor done on some of our most important ledges.

## PRINCE ROYAL DISTRICT.

This District is situated on Prince Royal Cañon, at the extreme northern end of the Humboldt mountain, and has many very important ledges; among them are the King, and Daniel Webster. Tunnels are being run to both of these ledges and shafts have been sunk on them—in the King ledge, to the depth of 35 feet. Tons of good rich mineral are lying by the side of the shaft. These ledges are both large and well defined. I think the King is second to no ledge in the Territory. It is about five or six feet wide and there is but little of the rock, which does not show mineral. On the opposite side of the hill three ledges are located, namely: Newton, Salust, and Colthurst. A tunnel is in progress to all three, and now run in solid rock one hundred and fifty feet. They have run across several rich spurs and are now into the casing of the Newton. The owners of the ledges consider the numerous spurs alone, sufficient inducement to put up a mill and work the rock; the ledge is large and well defined, having mineral streaks traversing the rock. Near the latter, is to be seen the Mark Anthony, Alsop, and Socrates. One tunnel is being run for the three ledges, and is in about 100 feet. No ledge is yet struck by this tunnel, but the ledges have been opened and a great quantity of argentiferous galena has been taken out, especially from the Mark Anthony. In one place I saw where they had run an open cut 15 or 20 feet across numerous spurs of pure mineral with a prospect of plenty more ahead. There appeared to be a solid mass of quartz, as far as the cut was run. Assays of all, or nearly all of this galena, prove it to be rich in gold as well as silver. The Prince Royal, American, and Yankee Blade are along the East Bank of Prince Royal Cañon. Two or three tunnels have been run, one 80 feet and the other about 50 feet, for the purpose of developing these ledges. The Prince Royal tunnel is a little past the perpendicular from the croppings of the ledge. This ledge is valued very highly. It shows plenty of fine mineral, but is not very wide, perhaps does not exceed three feet. Two mill seats have been located near the mouth of the tunnel. Pennsylvania, Napoleon, and Lilly, are the first nearest the Canon on the opposite side of the mountain. Tunnels are running to all, and they are all truly very fine ledges, especially the Napoleon, and Pennsylvania—narrow but very rich both in gold and silver. The Napoleon can be traced for over a mile. On this mountain are to be found the Washington, Honey and Lucinda—rich and well defined ledges, and from the quantity of mineral they possess I should judge they are not much inferior to any of the former ledges. Last but not least, stands the Fort Pitt. It is situated in the eastern portion of this district and is 4 to 6 feet wide and I never saw a piece of the rock but that contained mineral. It is now considered the equal of the Sheba or Mammoth, being on the same range north, but I consider it superior to either of them and believe it will furnish many a man a "home ticket." There are three companies, on this ledge and I do not think there is any choice in them, one is about as good as another. The ledge is easily tunneled as the mountain is abrupt. A plenty of wood is right about the vicinity of this ledge, and water sufficient for steam purposes. I know of no district or place more suitable for a mill than this Ravine at this lode. Several very rich ledges have recently been found on this range. Among them is the Ætna. It is equally as large as the Norton and has as fine mineral in the croppings as is generally found 50 feet below the surface. We come now to speak of the

## SANTA CLARA DISTRICT.

This is a small district, but a very rich one. The Magna Charta stands number one in this district. It is a well defined ledge and contains much very fine mineral, and is considered

a continuation of the Sheba North. I can simply say that it ranks second to none in these mountains and as soon as opened, in my opinion, will outstrip the original Sheba. The Wyoming, considered a continuation of the Mammoth, is truly a favorite ledge, the mineral is of finer quality, if anything, than the Magna Charta. It is a bold well defined ledge and held very high by the owners. The Kentucky is another favorite ledge of this district, contains plenty of mineral but not of quite so fine a quality. The Butte is well known to you all as being a very rich, small ledge. Tunnels are being run to all these ledges and much money has been expended on them, besides a great deal of labor, and I am certain this summer will prove this one of the richest districts in Humboldt Co. There are many other ledges here that are worth noting but I will defer the mention of them until my next letter. M.

## THE PIKE'S PEAK QUARTZ MINES.

A correspondent of the Territorial *Enterprise*, is giving some very interesting accounts from the Pike's Peak country, some of which we have already copied. We give further extracts from his correspondence, to-day. We have taken the liberty to rearrange some of the paragraphs.

## PECULIARITIES OF THE MINES.

The Pike's Peak ores contain no quartz. They are iron pyrites more or less mixed with copper pyrites, lead, antimony, etc. The croppings of the leads are a kind of brown granite, containing some quartz and a considerable amount of iron. On sinking upon this, however, veinstone of any kind is not found. The lead is a simple crevice in the granite bed-rock filled with a mass of pyrites. Free gold is sometimes found in the quartzose granite forming the croppings, but is never seen in the ore itself. I was shown pieces of pure granite, quite rich in free gold, of a beautifully bright yellow color. I saw but one or two specimens of pure quartz in which gold was to be seen. The veins of pyrites run in a northeast and southwest direction. There are numerous veins of quartz in the country, running almost due north and south. These have never been prospected to any depth. The miners don't like them. They don't want quartz—iron is what they are after.

When these mines were first worked, the miners supposed when the quartz gave out and the iron came in, that their mines were ruined. Then they all, in one grand chorus cursed the iron; now they curse the quartz, and hope to get down to where there is nothing but iron. While in Central City I was told that when the Gregory lead was first turned to iron, many supposed the country gone to the dogs. The owners as well as the principal business men of the Territory were greatly alarmed. The Gregory then was and still is, the leading mine in the country. If it petered it was like the Ophir fizzling, or Gold Hill giving out—all other leads in the Territory would be counted as naught. To save the lead and the country it was proposed to raise \$1200 by subscription to enable the company to sink through their iron. The money was raised and the work done. My informant was one of the subscribers to this fund, and he laughed heartily when he told me that it was soon discovered that the iron was richer than anything they had yet found in their mine. They had raised twelve hundred dollars to enable the company to dig and hoist ore worth one hundred and fifty dollars to the ton.

## THE ORES

as seen at the mills, are wholly free from clay or dirt, being but a clear heap of mineral. The ore is generally of a dark gray color, with yellow, shining pyrites visible on its surface, and often showing many bright rainbow tints, such as red, blue, green and yellow. I do not doubt but the ores of many mines in Colorado contain a considerable per cent. of silver. The American Flag and Kentucky, situated near Central City, present much the same appearance as the Sheba and other ores from the Humboldt mines. None of the mills at present in operation in the Territory would save anything but native silver. I saw ores from clear creek County, south of Central City, from a lead called the Whale, which were principally antimony, and might contain considerable percentage of silver. I was told that ores of this nature—that is principally composed of antimony and lead—were quite common on the west side of the mountains, but were not much liked by miners, leads in which iron predominates being more sought after.

The leads are not so wide as with us, generally but from two to six feet; but a few are much wider. In every case the ore of a mine becomes rich as the mine increases in depth; this was told me by everybody, and I could find no person who knew of a single exception to this rule. What everybody says must be true; therefore, all the Pike's Peak folks have to do is to go down deep enough and all their mines will pay. The country is full of leads, but very few of them are worked—only scratched over.

## PECULIAR MODE OF MEASURING THE ORES.

A cord of ore weighs from five to eight tons, owing to the

nature of the ore. Ore from near the surface, containing more or less blossom rock, is generally considered higher than that from a greater depth, containing little rock. The awkward plan of calculating and measuring their ores by the cord, instead of the ton, has done much to hurt the country. It has kept the miners and capitalists of California and Washoe in the dark as to the richness of the Pike's Peak mines. The papers of Colorado might just as well tell the mining world that they had ores paying ten dollars per basketful as to say that the Bobtail pays thirteen per cord. People know that there is a great difference in the weight of rock—a great difference in that from the same mine—and don't know whether there were five or ten tons of ore crushed to obtain the sum mentioned, and not knowing, are apt to throw aside the Colorado papers and think no more of the Pike's Peak mines. Assayers find measuring ores by the cord very inconvenient, or they must not only weigh the sample tested, but find out what part of a cord it is—this, an assayer told me, was generally ascertained by shrewd guessing. Ores are all hauled by the cord. Thus the man who has a rich lead, which is generally nearly all iron, and very heavy, gets his ore hauled at the same price as that paid by the man who is just opening his mine and has not yet got down to the rich heavy rock. It is also crushed by the cord, and a cord of the rich and heavy rock is crushed just as cheap as the poor and light ores. Were these light ores hauled and crushed by the ton, the saving in an hundred tons might make the mine a paying institution to its owners, instead of a losing one, as often happens. A few pairs of large scales erected in convenient places would soon effect the desired change, and make the doings of our Pike's Peak friends intelligible in other parts of the mining world.

## COST OF CRUSHING.

The price charged per cord for crushing is fifty dollars—ten dollars per ton, calling a cord five tons, or eight dollars and two bits per ton, counting eight tons to the cord. This leaves a very handsome profit to the owner of the ore when the cost of digging is not too great. The ore cannot be dug out with picks, however, as is generally the case with us, but every pound must be blasted out.

## MINING LAWS.

When a miner has found and recorded a lead it is his to all eternity. Glorious for lazy miners, but bad for the progress of the country. A man may locate fifty or a hundred claims, then set down and wait for somebody to strike something rich in the leads on which he owns. This is the plan of development chosen by the majority of claim-holders. One hundred feet on a lead is a claim—that is, one hundred feet square, and if a lead pitches out of this square it belongs to the man whose square it enters. But, in general, the leads run nearly straight down. Each locator, as a general rule, takes his claim by himself—is himself the company and the company's mother. There should be some time fixed for the expiration of the location. There are doubtless many very good claims standing recorded in the names of persons who have not been in the country for years; according to the present laws the person who should develop these would be liable to be driven off by the first locator, should he hear that something good had been found on his old claim.

## MILLS OF PIKE'S PEAK.

There are no large or very costly mills in the Pike's Peak mines. Their best mills are such as could be built at a cost of eight or ten thousand dollars in Nevada Territory. They contain but little machinery—nothing but the stamps for crushing, and copper plates and blankets in sluices for saving the gold. They do not even use the shaking-tables common in the old-fashioned California mills. Nearly all the gold saved is caught on the copper plates. Their stamps are ridiculously light, weighing but from four to seven hundred pounds. Then the cams by which they are hoisted are so long that the stamps are obliged to take a laughably long journey upward, when we consider the effect of this fall before coming down. It would appear to a Washoe mill man, watching one of these batteries, that the stamp spent nearly all their time in going up, yet, if he watched closely, he will find that every once-in-a-while one of them comes down—comes down with a crash equal to that of the clasher of an old churn. All the mills, however, are so slow coaches. Many millmen have shortened the cams, and consequently their stamps no longer go such long journeys heavenward; but they nearly all retain, believe I swear by their light stamps. A row of batteries, twenty, forty or eighty stamps, each stamp weighing a thousand pounds, would frighten them, especially if they can down as frequently as they do in our Washoe mills. No astras or pans are used in any of the Pike's Peak mills that I saw or heard of, with one exception. The mills do not save much over one third of the gold shown by assay to be contained in the ores.

## RICHNESS OF THE MINES.

They have, perhaps, twenty leads paying one hundred dollars and upward per ton, many that pay from twenty to fifty. The Gregory, Gregory Extension and Bobtail are about the best paying leads at present, though there are a dozen others nearly as rich in the same neighborhood. These we pay from five hundred to fifteen hundred dollars per cord, from one quarter to one fifth that amount per ton. Assays made long since, have shown that a large number of the veils



of the country were of extraordinary richness. Capitalists have been told this a thousand times over, and it is a shame that they should have haggled their wealth to their hearts and allowed poor men to struggle for years with difficulties that science which capital could have commanded would have at once surmounted. But capital is notoriously timid; however, had they applied upon the Pacific instead of Atlantic coast they would have met with better success. Now, when they begin to need no assistance, plenty of capitalists will come in and build mills, availing themselves of the hard-earned experience of men who have struggled manfully for the victory gained at last over their stubborn ores.

EXTENT OF THE MINES, ETC.  
One by one the mill owners are getting their heads above water, and we may soon expect to see Pike's Peak one of the most flourishing mining counties of the world. The time is now near at hand when the mineral wealth of the country will be properly estimated. Men of capital will come in and invest in the mines. From all I could learn, there is an immense scope of mineral country stretching away north, south and west of the Central City mines, which has been little prospected, and that only by persons in the look-out for iron. Native tin has been found in some of the western counties by miners when panning for gold. This was supposed by them to be metallic silver, and at a time a silver fever raged in that section.

TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metalliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; the rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel, and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphureted ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

Our object is to furnish the miners of California with every class of information which shall be valuable to them in

the progress of their calling and in the development of the mineral resources of the State, and we know of no way in which we can devote a portion of our time more to the interests of miners than in the manner here proposed. The only equivalent we ask is that they shall do what they reasonably can to sustain and improve the paper devoted exclusively to their interests.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector; and we have the promise also, at an early day—probably within a week or two—of a series of articles under the head of "THE MINER'S LABORATORY," which will be prepared especially for this paper by one of the most skillful metallurgists on this coast, and which will be found of great value to the mining public.

SAN FRANCISCO MINING NOTICES.

ASSESSMENTS LEVIED.

- Assessments upon Mining Stocks have been levied as follows:—  
Garabaldi.—Assessment of \$1 per share, levied March 2nd.  
Sutro.—Assessment of \$1 per share, levied Feb. 23, payable March 23.  
Silver Quartz Mill Co.—Assessment of 5 per cent. levied Feb. 24, payable March 28.  
Napoleon (copper).—Assessments of \$3 per share levied Mar. 3, payable in 30 days.  
Golden Age.—Assessment of one dollar per share levied Feb. 24, payable March 26.  
Washoe Gold & Silver.—An assessment of 2 per cent. on capital stock was levied Feb. 16, payable Apr. 1.

GENERAL NOTICES.

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets, San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.  
C. W. M. SMITH and W. B. EWER, Proprietors.

Engravings, Electrotypes, etc.  
We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STENOGRAPHY and ELECTROGRAPHY, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast to the best Advertising Medium to be found in the country.

To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

MINING AND SCIENTIFIC PRESS.  
THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.  
THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.  
This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

The Mining Interest!  
Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

The Inventor!  
Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

The Mechanic and Manufacturer!  
Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

To Chemists, Architects, Millwrights and Farmers!  
This Journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply supplied.

Terms.  
To mail subscribers:—Four Dollars per annum.  
Club Rates.  
Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.  
For all clubs of Twenty and over, the yearly subscription is only \$2 50. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,  
Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

Our Mint, its Rules, Charges and Operations.  
For parting silver from gold when gold is below 300-1000ths. fine . . . . . 3cts per oz.  
" from 30-1000ths. to 750-1000ths fine. 7 cts " " oz.  
" 750-1000ths to 950-1000ths " 14 cts " "

DEPOSITS SILVER BULLION—PURCHASES.  
\$1.21 per standard ounce 1/2 per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " " " "

DEPOSITS FOR FINE BARS  
\$1 16-4-11ths cents. per standard ounce, 1/2 per ct. gross value of silver for making bars; also when gold is contained 1/2 per ct. on gross value of gold for coining. Refining charges as in purchases.

Bars Sold FROM REFINERY.  
\$1 21cts. per standard oz. 1/2 per ct. gross value to be added for making bars.

DEPOSITED FOR DOLLARS.  
\$1 16-4-11ths. per standard oz. 1/2 per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

DEPOSITED FOR IMPORTED BARS.  
\$1 16-4-11ths. cents per standard oz. 1/2 per ct. gross value of deposit for making bars.



## MINING PROGRESS IN ESMERALDA.

From the local papers and from private advices, we notice that mining operations in Esmeralda, and that portion of the Eastern Slope, included in Mono County and the eastern section of Tulare, are being pushed with much vigor and energy. The most active efforts are being made to properly develop the mines, and render actual the suppositious values now represented upon the Stock issues of the Mining Companies of that region. We subjoin a few remarks collected from various reliable sources :

The *Aurora Times* speaks of a bar of gold and silver, the product of 9½ tons of rock and boulders taken from the surface of Mr. Preble's claim on Silver Hill. The bar as assayed \$29 32 in gold, and \$357 32 in silver.

The Ural Company are rigorously executing the work up on their lode, located upon Last Chance Hill. Their stock at last dates was held firmly at \$525 (α \$550.

The Bamboo are pushing ahead with their work night and day, and taking out rich ore, which is being crushed at Belden & Gregory's mill.

The Antelope is taking out better paying ore than ever. The *Star* of April 4th speaks of the rock which was then being raised as showing much gold and streaked with blue veins of silver sulphurets. We see no reason why the stock of this company should have depreciated of late in this city. It was sold at the Esmeralda Stock Board on the 16th inst. for \$400, since which time it has ranged in this city from \$300 to \$340. This mine is evidently improving with its depth. There are two shafts now being sunk upon the mine. This Company crushes its own rock, in an 18 stamp mill, with 16 amalgamating pans.

The Jennie Johnston, located between the Wide West and Garabaldi, is now being opened. The parties engaged in sinking the shaft are taking out rock which shows much free gold.

The Rose Dale, the Manning, Spring Valley & Magnet consolidation, are also in progress of active development. The latter named company is located but a few yards distant from the Wide West.

The Locomotive, on Silver Hill is turning out rich rock. Free gold and silver sulphurets are seen profusely in the rock. The shaft is now down about 100 feet and the rock is represented as appearing equally as rich as that from the Utah.

The Lady Jane, next adjoining the Locomotive, is also turning out very fine looking rock, plentifully sprinkled with sulphurets of silver. Its close proximity to the Antelope and Utah and other rich claims, aside from its actual developments warrants the belief that this ground will soon become very valuable.

The quartz mills in this region are enumerated as follows in the *Aurora Times* :—

The Union Antelope and Brodie, in good order and running. The Wide West (new) also running and the Spring Valley. The Winter's mill, up to very recently in good order and running constantly.

The following are not running—most of them being under repairs—but will be ready to resume work in a short time : Moses, Wide West old mill, Napa, Gibbons, Tucker & Stark.

Mr. Fogus of Sacramento, contemplates the erection of a new mill. The material and machinery are on the way, and expected soon to arrive. Mills are needed, and those of the very best and latest improved apparatus attached for saving the precious metals. The rock is here which contains sufficient gold and silver to insure large profits to the capital and labor engaged.

The Wide West, according to the *Star*, located on Last Chance Hill is being worked night and day. Their new mill is working finely. It has 20 stamps and 40 pans. Preparations are being made for the erection of additional buildings for the accommodation of settling tanks and furnaces.

The Pond Company at latest dates were sinking an air shaft for ventilating purposes. The rock from this mine is crushed at the Union mill.

The Fallstaff are sinking a shaft on their claims, 100 feet deep. The Silver Hill Consolidation have 75 tons of rock out.

The Bright Star, or Middle Hill, have sunk a shaft to the depth of 210 feet, at which they commenced drifting for

their lode. The Tiger is down 109 feet and have 75 tons of rock out. The Strawberry have a shaft down 100 feet and are on the ledge with good indications.

The Climax have a shaft down to their ledge, which is 8 feet inside at the point of intersection. The Hanson, on Last Chance Hill are down 65 feet, with a good ledge at the bottom of the shaft, and rock said to bear much resemblance to the Ophir. Work is being actively prosecuted in numerous other claims, from which important developments may soon be expected. The miners of Esmeralda have adopted the right method of bringing their mines into notice—by thoroughly developing their values. Speculative mining will not build up any place permanently.

The *Bulletin's* Esmeralda correspondent of April 13th says :—

The new Wide West mill has at last started, and for completeness of machinery and general success, it is unequalled in the district. The mine looks magnificent and is rolling out tons and tons of the richest kind of ore. The Antelope mill is running and the rock yielding largely. The Union mill still continues on Pod rock, with splendid success—the last clean up yielded over \$100 a ton. Gregory's mill is crushing Subbeam. Bodie's mill is still running on Bodie rock. All property in general is looking up, in the face of thousands of tons of quartz all stuck up, waiting for a turn. A new mill said to be a very fine one, is on the way here, belonging to a Mr. Fogus, late of Sacramento. He has a small battery attached to the main ones, calculated to crush a few hundred pounds of rock, and from that to judge of the value of any large lot sought to be worked by any company or offered for sale to the mill. The idea is an excellent one and should be adopted by all mill men of the district.

The Winters mill is said to have passed into the hands of the Real Del Monte Consolidation.

Work is going on at a great rate all over the hills, and incorporations are the order of the day. The superintendency of the Bambos has changed hands, Mr. Kyle taking the place of Dr. Howard. The change is expected to be productive of great benefit to the company and shareholders, as the new superintendent is one of the most thorough, practical miners in the country.

A contract is being let on the Young Winnemucca, for a tunnel of 700 feet, to tap the ledge 350 feet deep. The company has taken up a mill site near the proposed commencement of the proposed tunnel, and they will no doubt get the water needed from the tunnel, as the shaft at 60 feet depth has an abundance.

PROJECTED NEW PUBLIC EDIFICE

There are now six Temperance organizations in this city which pay an aggregate of \$132 per month for rent. We understand that it has been proposed to erect a building, in some convenient locality, finishing off the lower floor for stores, which it is supposed will let for a sum sufficient to pay a fair rate of interest on the entire property, thus securing a hall, rent free, to the several societies. An architect has already prepared a design well calculated for such a structure, and we understand that there will be no difficulty in procuring the necessary amount of funds, as soon as a suitable lot can be found.

We believe the Odd Fellows put up their Hall on Kearney street, on this plan, and we understand it works fully as well as anticipated. Money can now be had at a very low rate of interest. Indeed a large amount might be readily raised in the city by voluntary contributions in aid of the undertaking. Many, who never have, and probably never will unite with or take an active part in any temperance organization, are, nevertheless, free to acknowledge the great benefit derived therefrom by community at large, and are not only willing but anxious to do something, pecuniarily, for their aid. The donations from such sources would probably be amply sufficient to make such an advance on the property as would render the balance of indebtedness perfectly secure at the lowest rate of interest—say one or one and a quarter per cent. We trust the temperance people will be able to mature some plan for building on this basis. It would have a tendency to unite more closely the friends of the cause, and to give permanence and stability to the several organizations.

**APPOINTMENTS.**—Professor Whitney, the State Geologist, has been named as one of the incorporators in the Act recently passed by Congress incorporating the National Academy of Sciences. The first meeting of the Academy is proposed to be held in New York. W. H. Brewer also of the California Survey, has been appointed to the Professorship of Natural Sciences in the College of California.

HUMBOLDT Claims are beginning to be more favorably considered than heretofore, in this city, and a large amount of capital is finding its way into the "feet" of that region. The Sheba and other leading Humboldt stocks are beginning to be enquired for.

We had the pleasure, a few days since, of meeting our friend Charles Barber, who has just returned from that region, well stocked with "feet" of the most approved quality. We bade him adieu, about one year ago, as he started out from one of our mountain towns, a needy but hopeful adventurer into those distant regions. We now have the pleasure of welcoming him back, the possessor of claims which will to day enable him to "bank" a goodly fortune for any man. We rejoice in his prosperity, and cite it as but one of the numerous instances of good fortune which this wonderful country is daily developing.

Mr. Barber brings most encouraging accounts from the Humboldt men and has communicated much interesting and valuable information with regard to them, which we shall communicate to our readers in future numbers of the PRESS.

CONSOLIDATED BOARD OF BROKERS.—The Second and Third Board of Brokers of this city effected a consolidation last Thursday afternoon, and elected the following officers: President, Samuel Purdy; Vice-President, J. D. Stevenson; Secretary, J. H. Gager; Treasurer, J. D. Mathewson; Sergeant-at-Arms, C. Watson. The initiation fee is fixed at \$100. The Board now numbers 97 members, and meets daily at 1½ o'clock p. m.

MANY people consider the world as the worm does the interior of a nut—simply a place in which to feed and grow fat.

THE sales at the N. Y. Stock Exchange Board for the week ending March 1st amounted to \$9,209,000.

## GENERAL MINING STOCK REPORT.

### REPORT OF SALES

**At the San Francisco Mining Stock Board.**

For the week ending April 18th, 1863.

Names of Companies.	Total No. Shrs	Shares per ft	For Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2400	2425	2430	2400	—	—
Gould & Curry	4,800	4	500	3650	3675	3725	—	—	—
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Challier	5,600	4	300	385	395	—	350	350	382
Potosi	2,800	2	400	300	—	550	600	675	725
Hale & Norcross	800	2	500	—	725	750	850	820	820
Sierra Nevada	3,000	1	300	65	67½	67½	65	65	60
Daney	8,000	4	500	313	353	365	450	475	450
Burning Moscow	4,800	2	100	165	136	182½	150	165	160
North Potosi	2,000	1	300	42½	54	57½	41	41	42½
Rogers, F. D.	3,000	1	250	—	—	—	—	—	—
Meredith	7,200	2	125	45	—	—	—	42½	42
Charles Caney	1,800	1	30	100	110	100	111	115	125
Sacramento	1,800	1	500	—	—	65	—	52½	—
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	800	1	100	—	—	—	—	—	—
Savage	500	—	—	1775	1850	1900	—	1950	2050
Iowa	1	—	—	—	—	—	—	—	—
El Dorado	1	—	—	70	75	70	73	73	73
Kortan	1,600	1	18	18	18	18	17	17½	17
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	37½	35	32	36	35	36
Adriatic	—	—	—	9	8	8	—	—	—
Cedar Hill Tunnel	—	—	—	5	4½	4	—	5½	5
Mount Davidson	10,000	3	200	5½	5½	—	—	—	—
<b>EMERALDA STOCKS.</b>									
Wide West	2,600	4	60	377½	370	340	300	300	325
Ambletop	1,200	1	500	290	300	37	35	—	30
Esmeralda	1,000	1	1000	175	—	—	—	42	12
Real Del Monte	4,400	1	400	—	150½	175	125	130	12
Etna	1,200	1	100	95	—	7	7½	6	1—
Utah	—	—	—	60	—	85	100	105	05
Silver Hill	3,000	1	30	52	—	46	39	1½	1½
Nevada	—	—	—	26	—	—	10	4218	—
<b>COSO STOCKS.</b>									
Josephine	—	—	22	—	24	22	21½	22	24
Coso	—	—	—	14	—	—	—	—	—
Willow Springs	—	—	—	—	14	13½	12	14	18
<b>MEXICAN MINES.</b>									
Mina Prieta	—	—	—	—	—	—	—	—	—
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoli	—	—	—	26½	—	—	—	—	—
CALIFORNIA STOCKS.	—	—	—	—	32	34	—	35	50
Laurel Hill	—	—	—	—	—	—	—	—	—
Utica	—	—	—	—	—	8	—	—	—



## REMARKS.

Notwithstanding the transactions in the Mining Market, for the past week have involved a much smaller amount of capital than usual, still there appears to be no decrease in the activity of operators. The number of transactions and the amount of feet transferred has probably been greater than during any corresponding period, as business has been mostly confined to second and third class stocks. As a necessary consequence great fluctuations have occurred, some stocks closing the week at an advance and a few falling off. Such a condition of things is inseparable with all mining operations of a progressive nature.

Among the stocks which have advanced we note the Daney, Savage, North Potosi, Lady Bryan, Chas. Caney, Napoleon, Utah and Governor.

Among those which have declined are the Antelope, Chollar, Silver Hill and Pond. In each case, the decline is but a simple fluctuation from which all will in all probability fully recover another week.

In Ophir, Gould & Curry, Central, Savage and Chollar, but little has been done. But 20 feet in the aggregate, has changed hands in these claims. Savage has been considerably sought after at the large advance of \$500, all we note but one transaction of two feet only.

The Daney has been in good demand throughout the week. We note an unusual number of sales. Commencing the week at \$313, this stock gradually advanced to \$316 and finally closed at \$400 @ \$500. The reports from its mine are very encouraging. We last week gave the results of the first and second weeks crushing as \$10,000 and \$21,000. We now add the third week at the materially increased figure of 30,000.

Chas. Caney. We still continue to hear favorable accounts from this mine, which is the first East extension of the Daney. They have struck a ledge in their new shaft at the depth of 50 feet, with good indications, due to 8 inch, 8-foot stroke Cornish pump is now being put up at the mine. To note a material advance in its stock during the week. It commenced at \$100 and closed firm at \$125 cash.

Lady Bryan still continues to be largely dealt in, and during the past week at steadily advancing rates. Opening at \$14, it closed at \$19½ br. 30.

## ESMERALDA.

Wide West has been subjected to a fluctuation from \$300 to 385, caused by an assessment of \$50 per share to liquidate indebtedness, at a time when many holders were expecting dividends instead. The accounts from the mine, which bear every evidence of creditability would seem to warrant a healthy condition, and it is difficult to see the necessity for the above assessment. The Wide West is undoubtedly all that is represented, and we are of the utmost confidence of soon having the pleasure of placing it on the list of dividend paying mines.

Antelope has declined about \$30 during the week. We are unable to see any reason for a decline in this stock. It appears to remain firm at Esmeralda, where a large portion of the stock is held, and where the condition of the mine should be best known. It is reported that the mine looks well, is turning out good rock, and that the mill is working finely. Such conditions ought not to admit of any depressing action upon its stock.

Silver Hill has fallen off in consequence of advices that they had lost their suit with Hanover.

The Melones, a new comer in this market has been much sought after during the week. Commencing at \$50 it advanced to \$125 and subsequently declined to \$80 @ 80 and \$100 seller 30 days.

An interesting detail of operations in Esmeralda will be found upon our 4th page.

## COPPER STOCKS.

Napoleon Stock has met with a material advance during the week, having gone up from \$26, last week to \$50 cash, and \$55 a 60 da. We are of opinion of the cause of this sudden advance, but presume it to be in consequence of favorable reports from the mine which has recently been placed under a new and able management.

## TRANSACTIONS IN SHARES, FOR THE WEEK.

## NEVADA STOCKS.

Ophir—12 at \$2,400. Gould & Curry—4 at \$3,700.  
Potosi—10 at \$550, 11 d.  
Chollar—8 at \$400; 4 at 400; 16 at 380.  
Chas. Caney—19 at \$120, br 10 ds; 10 at 100; 61 at 110; 6 at 120; br 30 d; 19 at 105; 11 at 108; 45 at 110; 19 at 115; 5 at 107½; 5 at 115, b 30 d; 5 at 151; 38 at 135, b 30 d; 15 at 125.  
Burning Moscow—50 at \$190, br 30 ds; 20 at 117½; 12 at 160; 120 at 150, s 30 ds; 20 at 162½; 20 at 150, s 30 ds; 0 at 170, b 30 ds; 80 at 165 b 30 ds; 10 at 152½; 20 at 56.  
Daney—60 at \$313, 12 at 325; 36 at 315; 60 at 330 b 30 d; 20 at 300; 16 at 305; 60 at 324, b 30; 20 at 310; 60 at 350; 12 at 355; 40 at 360; 80 at 365; 60 at 400, b 30 d; 3 at 340, b 30; 4 at 330; 20 at 400, b 30; 40 at 455; 8 at 405; 40 at 500; 20 at 525 b 30; 12 at 495; 28 at 480; 20 at 485; 0 at 520 b 30 d; 20 at 515; 20 at 522½, b 30 d; 20 at 490.  
North Potosi—5 at \$43; 30 at 45; 20 at 48; 15 at 50; 10 at 52½; 4 at 56; 1 at 57½; 25 at 60, b 30 d; 4 at 55; 15 at 57½; 10 at 42; 39 at 41; 45 at 45, b 30 d; 50 at 46, b 30 d; 5 at 42½; 10 at 41½; 10 at 42.  
Lady Bryan—57 at \$14; 30 at 15, br 30 ds; 175 at 16, br 30 ds; 50 at 14½; 65 at 14; 50 at 17 br 30 ds; 22 at 4½, br 30 ds; 10 at 13½; 50 at 18, br 30 ds; 300 at 19, b 30 d; 10 at 15; 132 at 18, b 30 d; 210 at 18; 50 at 18½; 200 at 15; 160 at 18, b 30 d; 60 at 15½; 50 at 19½, b 30 d; 0 at 16; 25 at 16½; 100 at 15½.  
Pond—10 at \$70. Madison—10 at \$12; 20 at 15.  
Nevada—10 at \$37. Savage—2 at \$2250.  
Burnside—15 at \$40; 42 at 36; 5 at 36.

Reese River—125 at \$6; 100 at 6¼; 175 at 5½; 100 at 5½; 45 at 5.  
Norton—6 at \$20.  
Sierra Nevada—10 at \$63; 80 at 72½, b 30; 10 at 67½; 60 at 70, b 30; 10 at 67½; 10 at 70, b 30 d; 15 at 66½.  
El Dorado—30 at \$72; 5 at 70; 5 at 72½.  
Coppers & Mills, No. 1—5 at \$425.  
Hazel Green—10 at \$3. Sacramento—7 at \$70.  
Governor Nye—20 at \$15; 100 at 15, s 30 d; 10 at 13; 25 at 13½; 50 at 14; 35 at 12.  
Hale & Norcross—10 at \$800, b 30 d; 10 at 875, b 30 d; 20 at 840 b 30 d; 10 at 890 b 30 d; 10 at 820; 10 at 875, b 30 d.  
Santa Rosa—21 at \$5.  
Cedar Hill Tunnel—100 at \$5; 5 at 6.  
Melones—5 at \$105; 17 at 100.  
Peytona—10 at \$30. Union, Gold Hill—10 at \$25.

## ESMERALDA STOCKS.

Wide West—\$10 at \$385; 10 at 375; 10 at 350; 75 at 375 b 60 d; 10 at 370 b 60 d; 10 at 367½, b 30 d; 25 at 375; b 30 d; 2 at 355; 40 at 300; 5 330 b 60 d; 15 at 315.  
Antelope—15 at \$300; 43 at 300 @ 320; 14 at 300.  
Bamboo—10 at \$48. Pond—5 at \$82½; 10 at 85.  
Silver Hill—5 at \$52; 5 at 52½; 10 at 50; 28 at 45; 40 at 40; 50 at 40, b 30 d; 25 at 42½.  
Utah—43 at \$100; 25 at 105; 10 at 110; b 30 d; 30 at 110.  
De Soto—5 at \$75.  
Tucker—15 at \$3; 125 at 2; 5 at 2½; 30 at 2½.

## COPPER STOCKS.

Josephine—35 at \$22; 10 at 24, b 30 d; 10 at 24½, b 30 d 24 at 24; 30 at 27, b 30 d; 85 at 23; 20 at 25, b 30 d; 20 at 26, b 30 d.  
Mina Prieta—2 at \$150.

## COPPER STOCKS.

Napoleon—20 at \$33; 45 at 30; 20 at 34, b 30 d; 6 at 36; 30 at 40; 20 at 26, b 30 d; 12 at 43; 200 at 55, s 60 d.  
California Smelting Works—100 at \$4.87½.

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Friday, April 9.

Virginia Mining District.		Gold Hill District.	
Bid.	Ask'd	Bid	Ask'd
Ashland.....	9	Shamrock.....	8
Albion.....	65	Texas.....	10
Albion.....	150	Union (Virginia District).....	8
Albion.....	25	U. S. Tunnel.....	5
Albion.....	45	Utah.....	52½
Albion.....	10	Old Virginia.....	12
Albion.....	12	Washington.....	5
Albion.....	45	York.....	6
Albion.....	25	Zuñave.....	17
Albion.....	150		
Albion.....	200		
Albion.....	5		
Albion.....	175		
Albion.....	9½		
Albion.....	15		
Albion.....	10		
Albion.....	4		
Albion.....	5		
Albion.....	6		
Albion.....	75		
Albion.....	45		
Albion.....	15		
Albion.....	15		
Albion.....	25		
Albion.....	70		
Albion.....	80		
Albion.....	35		
Albion.....	15		
Albion.....	6		
Albion.....	12		
Albion.....	10		
Albion.....	3½		
Albion.....	15		
Albion.....	30		
Albion.....	40		
Albion.....	17		
Albion.....	65		
Albion.....	12		
Albion.....	4		
Albion.....	5		
Albion.....	60		
Albion.....	62½		

## WASHOE STOCK REMARKS.

For the week ending April 11th, 1863.

[COMPILED FROM THE DAILY TERRITORIAL ENTERPRISE.]

Judging from the limited reports for the week ending with the present date, and from other indications we infer that the stock market in Virginia City has been somewhat sluggish for the past six days. On Tuesday a terrible storm of wind and driving snow kept the streets pretty clear of pedestrians, and appeared to put a pretty effectual check on transactions of all kinds. The absence also of any special excitement or "big strike" no doubt produced considerable effect on the market. The Enterprise reporter of Friday remarks that the brokers seem to enjoy the apathy with much relish, conscious that it must be of short duration. The business hours of the Boards were on that day devoted to amusing assays at further depressions, without a disposition even to fill orders or dispose of stocks to ready purchasers. This temporary inaction will be followed by unwonted animation, without a doubt, and that, too, within a few days. The developments everywhere being made must lead to an excitement in the stock market.

The Osceola, on Cedar Hill, appears to have furnished the only item of the week approaching to a sensation. Good ore and a very large ledge are

reported in sight. As a consequence the stock has advanced somewhat, and is reported to have been sold at \$20.

The Lancers Company have struck indications of a valuable ledge, and specimens of ore are being exhibited. This company's ledge, it is surmised, is a north extension of the El Dorado.

Very promising quartz, resembling in some respects the Comstock ore, is shown from works two miles north of Virginia, and the veritable Comstock, it is said by the enthusiastic, has been found in that locality.

The Potosi is advancing, and was in demand on Monday at \$416 @ 425. On Wednesday no shares were in market at less than \$475.

Sacramento is in market at \$62 50, and cannot be quoted higher. Selling is dull at these figures; thirty feet sold on Monday at \$62.

United States Tunnel shares are advancing and may be quoted at \$750 @ 800 per quarter share of \$16,000, with a fair demand and upward tendency.

Burnside is entirely inactive, and is in market at \$40 @ 42 50, without takers.

Norton is saleable at \$20 @ 22 50, with little offering at less than \$25 @ 27 50.

Belvidere is marketable at \$20, but higher bids are demanded.

The Insurance, a claim immediately back of the Beach & Paxton, is in request at \$10, to fill orders from below. It is generally held for higher rates. It is a San Francisco incorporation.

Baltic is in request at \$16 @ 18, at which rates two or three hundred feet have changed hands during the week.

Eureka, Gold Hill, is in request at an advance, in consequence of developments. We quote it at \$45.

The United States Mining Company who hold quite a number of parallel ledges just to the north of the Ophir have their tunnel now in 1650 feet and are expecting every day to strike the Comstock ledge. This company own some five or six parallel ledges. Their stock which is now worth about \$10 in the San Francisco market, will probably go up to a much greater figure as soon as their tunnel reaches the ledge. Among other shares tending upward in the Virginia District, we may mention the Fairview, Buchanan, Moray, United States, Birdsall, Utah, etc., although no very decided advance has occurred.

Gold Hill shares are in high favor and many of them are advancing rapidly. Leon is saleable at \$40, Princess at \$40, Overman at \$45, Belcher at \$150, Koh-i-noor at \$150, Yolo at \$20, Dunn at \$3, etc.

## ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

Esmeralda Stock List.		Esmeralda Stock List.	
Bid.	Ask'd	Bid	Ask'd
Amador.....	5	Heath.....	10
Amador.....	6	Herman Consul.....	15
Amador.....	6	Home Clock, Excelsior Dis.....	30
Amador.....	400	Kenney.....	30
Amador.....	15	Lake Yankee.....	15
Amador.....	8	Lord Byron.....	7
Amador.....	5	La Plata.....	10
Amador.....	10	Main Esmeralda.....	55
Amador.....	20	Monroe.....	85
Amador.....	7	McKinstry Tunnel Co.....	3½
Amador.....	15	Monte Christo Tunnel Co.....	60
Amador.....	15	Mutual.....	12
Amador.....	10	Mount Briley.....	3
Amador.....	18	New Esmeralda Consul.....	6½
Amador.....	6	Newton.....	50
Amador.....	12½	Nevada (Tunnel).....	20
Amador.....	20	Oxark.....	30
Amador.....	6	Old Wagon.....	10
Amador.....	12	Paul Tunnel Co.....	2
Amador.....	10	Peck.....	5
Amador.....	150	Pond.....	125
Amador.....	150	Pride of Antelope.....	5
Amador.....	9	Peru (two ft. to the share).....	12
Amador.....	10	Real Del Monte.....	100
Amador.....	10	Rebecca.....	17½
Amador.....	28	Strawberry.....	20
Amador.....	10	Silver Hill.....	60
Amador.....	6	Silver Hill, Bodie District.....	1
Amador.....	5	St. Louis.....	5
Amador.....	9	Tiger.....	4
Amador.....	4	Tucker.....	10
Amador.....	1	Tennessee.....	20
Amador.....	20	Union Tunnel.....	30
Amador.....	13½	Utah.....	120
Amador.....	60	Ural prop.....	550
Amador.....	5	Ural [extension].....	10
Amador.....	25	William Tell.....	2½
Amador.....	16	Wide West.....	400
Amador.....	20	Washington Tunnel comp.....	5
Amador.....	40	X-Elex and Constant comp.....	1½
Amador.....	3		

## TRANSACTIONS OF THE WEEK.

Bunker Hill, Bodie District—75 at \$15.

Willow Spring—65 at \$40.

Magnet & Spring Valley—30 at \$20.

Rebecca—10 at \$7½

Silver Hill, Bodie District—100, at private rates.

## DR. VA ZADT,

Consulting Physician and Surgeon.

OFFICE:

Corner of Washington and Sansone Streets.

C. W. THOMAS, Plating Mill, California street, facing the Mission R. R. Depot. San Francisco.

TURNER, MARSH & OSGOOD, Successors to C. O. Turner & Co., importers of Wines and Liquors, S. E. cor. Front and Sacramento sts.

D. R. J. B. BEERS—Dentist, 617 Clay street. All operations on the teeth performed in the most skillful and approved manner.

WILLIAM FELL, Notary Public for Storey County, N. T. Commissioner of Deeds for California Virginia City, N. T.

PALMER, HANSON & Co. Golden State Foundry, and Machine Works (Formerly Sutter Iron Works.) First street near Market.



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value.	shrs per foot.	ass'ts to date	Name of Company	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value.	shrs per foot.	ass'ts to date
RUTH WINDSOR TAIL CO.	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	\$100,000	\$100	1	\$	MONIAR, G. S. & Copper	La Paz, Colorado.	G. J. Turner.	606 Montgom'y st	\$250			\$
ANTHONY & SONS	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	400,000	500	1	none	BLUTE RIDGE MINING CO.	State Range.	G. J. Turner.	606 Montgom'y st	240,000	100	3 ft	
JEFFERSON	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	600,000	500	1	none	MADISON, SLATE RANGE	State Range.	G. J. Turner.	606 Montgom'y st	284,500	100	2 ft	
COOK	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	60,000	100	1	none	SAN FRAN. SLATE RANGE	State Range.	G. J. Turner.	606 Montgom'y st	210,000	100	2 ft	
CEDAR	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	120,000	100	1	none	CATYGA MINING CO.	State Range.	G. J. Turner.	606 Montgom'y st	195,000	100	2 ft	
SONOGAME	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	140,000	100	1	none	TRICITION	Virginia District.	N. Shiverick.	Mer. st. Mutg bldg	600,000	500	1	
SENEGGA	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	120,000	100	1	none	COLE	Virginia District.	W. E. Wood.	123 California st	1,500,000	500	1	15,000
RED WHITE & BLUE	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	120,000	100	1	600	HAWLEY	Devil's Gate Dist.	C. Stevens.	6 Parrots Building	880,000	400	1	2,200
LILLY OF THE WEST	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	140,000	100	1	none	PETTONA	Virginia District.	C. Stevens.	6 Parrots Building	100,000	100	1	
ESTICK	Esmeralda District	T. L. Bibbins.	305 Montgom'y st	120,000	100	1	none	CLEAR CREEK	Devil's Gate Dist.	C. Stevens.	6 Parrots Building	1,100,000	500	1	
BULLION	Van Horn District.	T. L. Bibbins.	305 Montgom'y st	980,000	100	1	none	MASIDORA	Sonora, Mexico.	F. H. Waterman.	618 Merchant str	240,000	100	1	none
LAUREL HILL MINING CO.	Tuolumne County	C. S. Higgins.	410 Montgom'y st	300,000	100	1	none	ONIDA	Esmeralda District	E. Daniels.	Cashier Custom H.	600,000	500	1	none
UNION	Russ District.	C. S. Higgins.	410 Montgom'y st	1,620,000	100	1	290	RHOODES DRUGS Q M CO	Sacramento County	Gve. Touchard.	414 Montgom'y st	570,000	400	1	2,280
COMBINATION	Telescope District.	C. S. Higgins.	410 Montgom'y st	990,000	50	2	5,275	SAM WRIGHT	Aurora, Mono Co.	E. Worth.	547 Washington st	700,000	500	1	700
BULLION	Russ District.	C. S. Higgins.	410 Montgom'y st	465,000	50	2	1,700	ST. CLAIR	Aurora, Mono Co.	E. Worth.	547 Washington st	120,000	200	1	none
WHITE & MORSEY	Virginia District.	J. P. Nourse.	Lucas & Turners bldg	125,000	100	1	none	FEDERAL UNION	Aurora, Mono Co.	J. F. Bailey.	40 Montgom'y Bldg	300,000	500	1	600
MINA PRIETA	Sonora, Mexico.	J. P. Nourse.	Lucas & Turners bldg	2,200,000	100	1	68,000	JOSEPHINE	Devil's Gate Dist.	John Armstrong.	Stevenson House.	1,200,000	250	1	
BURNING MOSCOW	Virginia District.	J. P. Nourse.	Lucas & Turners bldg	450,000	100	2	45,000	JEWELL	Devil's Gate Dist.	John Armstrong.	610 Merchant str	120,000	200	1	300
BUCKEYE	Silver City	F. S. Carter.	415 Sansome st.	280,000	100	1	none	NEVADA COPPER Mfg. Co.	Grass Val. Nev. Co.	John Armstrong.	610 merchant str.	240,000	100	2	1,200
AMERICAN	Virginia District.	R. L. Taylor.	612 Washington st	160,000	100	1	3,200	CINCO SENORES	Sinaloa, Mexico.	John Armstrong.	610 merchant str.	600,000	200	2	none
FRANCES	State Range Distr.	A. H. Clark.	522 Washington st	105,000	500	1	1,050	JACK HAYES	Esmeralda District	J. H. Blood.	7 Montgom'y Bldg	60,000	50	1	none
SLATE RANGE	State Range Distr.	A. H. Clark.	522 Washington st	1,050,000	500	1	1,050	TEDESSE	Esmeralda District	J. H. Blood.	7 Montgom'y Bldg	60,000	50	1	none
ROCHESTER	State Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	SAM PATCH	Esmeralda District	J. H. Blood.	7 Montgom'y Bldg	100,000	100	1	none
PALADEPHEA	State Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	KOEBER	Esmeralda District	J. H. Blood.	7 Montgom'y Bldg	100,000	100	1	none
NEW YORK	State Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	COLEMAN	Esmeralda District	J. H. Blood.	7 Montgom'y Bldg	100,000	100	1	none
CATARAUGUS	State Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	none	LUCAS & TURNER	Gold Hill District.	S. Paxon.	Sansome street.	900,000	500	1	
ALBANY	State Range Distr.	A. H. Clark.	522 Washington st	315,000	150	1	4,200	MOUNT DAVIDSON G & S	Virginia District.	F. A. Fabens.	47 Montgom'y Bldg	2,000,000	200	44 in	20,500
LADY BRYAN	Flowery District.	J. F. Bailey.	40 Montgom'y bldg	500,000	100	1	none	Meredith	Virginia District.	E. B. Holmes.	712 Montgom'y st	900,000	125	2	
DESERT M. CO.	Flowery District.	David Wilder.	522 Montgom'y st	440,000	150	1	none	PIONEER COSO	Coso District.	E. B. Holmes.	712 Montgom'y st	450,000	100	1	2,750
ADRIATIC	Flowery District.	S. R. Rooney.	7 & 8 Gov't House	270,000	100	1	5,000	MUNIZALLO	Sinaloa, Mexico.	Eddy.	616 merchant str.	600,000	100	1	
EVERETT	Humboldt, N. Ter.	J. H. Gager.	Merch st. mut bldg	120,000	100	1	600	MESS.	Virginia District.	R. T. C. Page.	428 Montgom'y st.	600,000	500	1	
KORNA STAR.	Humboldt, N. Ter.	J. H. Gager.	Merch st. mut bldg	120,000	100	1	600	SOUTH UTAH	Virginia District.	P. B. Cornwall.	608 merchant str.	400,000	100	1	
CRYSOPOLIS	Silver Mt. mono.	J. H. Gager.	Merch st. mut bldg	200,000	100	1	600	MELONES & STANISLAUS	Calaveras County.	L. Franconi.	Lucas & Turner bldg	150,000	50	18 in	none
ESTRELLA DEL MONTE	Humboldt dis. u.t.	J. H. Gager.	Merch st. mut bldg	300,000	300	1	4	ALAMEDA COAL MINING CO	Alameda County.	L. Franconi.	Lucas & Turner bldg	500,000	100	1	6,000
MANHATTAN	Humboldt dis. u.t.	J. H. Gager.	Merch st. mut bldg	180,000	100	1	1,350	GOULD & CURRY	Virginia District.	J. C. L. Wadsworth.	Lucas & Turner bldg	2,400,000	500	1	
LIVE OAK COPPER	Gopher, Calay Co.	J. H. Gager.	Merch st. mut bldg	252,000	210	1	1,350	KATE	Humboldt Nev. Ter.	L. Franconi.	Lucas & Turner bldg	180,000	100	1	450
SIGEL	Humboldt, N. Ter.	J. H. Gager.	Merch st. mut bldg	600,000	500	1	none	HOPE	Humboldt Nev. Ter.	L. Franconi.	Lucas & Turner bldg	180,000	100	1	450
OCCIDENTAL	Emma Francis dis.	J. H. Gager.	Merch st. mut bldg	245,000	100	1	none	OPHIR	Virginia District.	Thos J. Lamb.	Run. 1, Express bldg	5,000,000	300	12 in	none
ANNIE LAURA	Humboldt District.	J. H. Gager.	Merch st. mut bldg	600,000	500	1	none	SILVER CITY DISTRICT	Silver City District.	E. A. Breck.	608 merchant str.	2,800,000	500	1	none
STARLIGHT	Esmeralda District	William Winchester	Merch st. mut bldg	120,000	100	1	none	NORFOLK COPPER Mfg. Co.	Calaveras County.	E. J. Voic.	Cor. Bat. & Wash.	1,100,000	500	1	none
ZETA	Esmeralda District	W. J. O'Strauch	815 Sansome street	100,000	200	1	none	NORMAN	Virginia District.	J. H. Brewer.	40 Montgom'y Bldg	160,000	100	1	2,600
ALABAMA	Devil's Gate Dist.	S. Pattee	522 Montgom'y st	1,300,000	500	1	14,300	SIERRA NEVADA	Virginia District.	J. H. Brewer.	40 Montgom'y Bldg	1,600,000	500	1	110,000
WIDE WEST	Esmeralda District	S. Pattee	522 Montgom'y st	1,750,000	400	1	6,400	EARLY DAWN	Devil's Gate Dist.	J. H. Brewer.	40 Montgom'y Bldg	200,000	250	1	none
REAL DEL MONTE, CONS.	Esmeralda District	S. Pattee	522 Montgom'y st	900,000	500	1	13,200	PORTER	State Range	R. C. Page.	420 Montgom'y st	300,000	500	1	12,000
ESMERALDA MINING CO.	Esmeralda District	S. Pattee	522 Montgom'y st	1,800,000	1000	1	27,000	SCORPION	Virginia District.	W. H. Martin.	617 Clay street.	120,000	100	2	120
SILVER HILL, CONSOLIDATED	Esmeralda District	S. Pattee	522 Montgom'y st	1,800,000	500	1	1,000	SILVER CITY	Silver City	O. Ristion, Jr.	Cor. Bat. & Bush	1,000,000	100	1	12,600
ANTHONY	Silver City District.	J. F. Pope	115 California st.	200,000	100	1	4,500	SUCCESSOR	Gold Hill District.	R. H. Waller.	1 Montgom'y bldg	240,000	100	1	28,600
LOUISA	Flowery District.	J. F. Pope	115 California st.	900,000	300	1	1,500	SIERRA	Guena District.	S. P. Vandyk.	127 Clay street.	500,000	500	1	1,200
ROGERS	Devil's Gate Dist.	J. F. Pope	115 California st.	300,000	100	1	8,400	SILVER CITY QTY. MILL CO.	Silver City	E. Bauer.	414 Washington st	1,200,000	100	1	none
ALAMO	Lower California.	S. C. Sprague	Cor Cal & Sansome	72,000	500	1	15,600	ALBION	State Range	W. H. Clarke.	224 Montgom'y st	210,000	100	1	none
BELLA VISTA	Virginia District.	S. C. Lovell.	712 Montgom'y st	280,000	100	1	1,000	MILWAUKEE	State Range	W. H. Clarke.	224 Montgom'y st	270,000	100	1	none
BURNSIDE	Esmeralda District	R. N. Van Brunt.	706 Montgom'y st	800,000	400	1	1,000	MORROW, EASL.	State Range	W. H. Clarke.	224 Montgom'y st	170,000	100	1	none
BADDER	Esmeralda District	R. N. Van Brunt.	706 Montgom'y st	1,250,000	100	1	1,000	WILLOW, EASL.	State Range	W. H. Clarke.	224 Montgom'y st	180,000	100	1	none
IOWA	Esmeralda District	R. N. Van Brunt.	706 Montgom'y st	80,000	500	1	17,900	TESSOR	State Range	W. H. Clarke.	224 Montgom'y st	240,000	100	1	none
LATROBE RUN & MFG CO.	Esmeralda District	R. N. Van Brunt.	706 Montgom'y st	1,200,000	100	1	10,000	MOUNTAIN VIEW	State Range	W. H. Clarke.	224 Montgom'y st	240,000	100	1	none
NORTON	Esmeralda District	R. N. Van Brunt.	706 Montgom'y st	1,200,000	100	1	10,000	WASHINGTON	State Range	W. H. Clarke.	224 Montgom'y st	210,000	100	1	none
REESE RIVER	Esmeralda District	R. N. Van Brunt.	706 Montgom'y st	1,200,000	100	1	10,000	SACRAMENTO, EAST. G. S.	State Range	W. H. Clarke.	224 Montgom'y st	270,000	100	1	none
SAN MARCIAL	Sonora, Mexico.	R. N. Van Brunt.	706 Montgom'y st	264,000	90	1	10,000	SANTA ROSA	Virginia District.	Nelson Hudson	Front street.	1,200,000	500	1	none
SAVAGE MINING CO.	Virginia District.	G. B. McAnney	Cor Mont & Jeku.	1,600,000	1000	1	14,400	SACRAMENTO	Virginia District.	J. W. Moore	408 California st.	900,000	500	1	none
CALIFORNIA	Virginia District.	G. B. McAnney	712 Montgom'y st	1,600,000	300	1	14,400	WILLOW SPRINGS G. S.	Coso District.	J. H. Sayre	24 Montgom'y st	270,000	100	1	none
CENTRAL	Virginia District.	G. B. McAnney	712 Montgom'y st	540,000	300	1	2,800	LEWIS	Coso District.	H. A. Chambers.	700,000	500	1	none	
CEDAR HILL M. & T. CO.	Virginia District.	W. E. Farrington	609 Sacramento st	1,650,000	300	4	2,800	TESOR	Lower California.	S. C. Kibben.	Cor Sansome & Cal.	540,000	100	1	none
CHOLLAR	Virginia District.	W. E. Deane	65 Mont'y Bldg	350,000	250	1	10,000	UNITED STATES	Esmeralda District.	S. R. Rooney.	7 & 8 Gov't House	200,000	100	1	none
CHENGANO	Silver City	J. H. Jones.	321 Front street.	1,200,000	100	1	10,000	VILLANAR MINING CO.	Lower California.	J. D. Cronigh.	cor mer & mont	240,000	100	1	none
CROWN POINT	Devil's Gate Dist.	Gomer Evans	338 Mont'y st.	54,000	30	5	30	WASHEE	Gold Hill District.	D. A. Jennings.	Jackson, cor. Frnt	1,000,000	500	1	none
CHARLES CAVEY	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	30	COSO	Coso District.	E. W. Chambers.	11 Court Block.	1,950,000	500	1	600
CORCORAN	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	30	PRIDE OF ESMERALDA	Esmeralda District.	J. F. Bailey.	40 Montgom'y bldg	300,000	100	1	600
EMMETT	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	30	IDA G. & S. MINING CO.	Russ District.	David Wilder.	522 Montgom'y st	610,000	250	1	600
DOYLE	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	30	SALUBRE MOUNTAIN COP.	Chihuahua, Mexico.	M. G. Elmore.	500 Montgom'y st	900,000	500	1	none
JEANES	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	30	OLUSA G. & S. M. CO.	P. R. dis. Humb.	M. G. Elmore.	500 Montgom'y st	900,000	500	1	none
KOHLER	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	30	RIP VAN WINKLE G. S.	Esmeralda District.	M. G. Elmore.	500 Montgom'y st	300,000	250	3	none
LIVINGSTON	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	30	SCHMELTZER	American dis. Hum.	M. G. Elmore.	500 Montgom'y st	300,000	100	2	none
VIBRANT	Esmeralda District	James Neary	326 Clay street.	60,000	100	1	30	SAN FRANCISCO G. S. M. CO.	San Francisco Co.	M. G. Elmore.	500 Montgom'y st	1,400,000	500	1	420
LAS CRUZITAS MINING CO.	Mexico.	C. J. Brennan	cor J. E. & Frnt	250,000	125	1	400	FLOWERY MINING CO.	Flowery District.	James Peck	707 Sansome st.	100,000	100	1	none
DADA	Esmeralda District	Joseph R. Beard.	4 Armory Hall.	1,600,000	200	1	350	FOUNDATION M. & T. CO.	Esmeralda District.	A. Davidson.	Oakland	300,000	100	1	none
LILY DALE	Esmeralda District	Joseph R. Beard.	4 Armory Hall.	240,000	300	1	350	FRANCISCO AMERICANO	San Antonio L. Cal.	A. S. Gould.	508 clay street.	450,000	750	10 ft	none
MAMMOTH, No. 1	Esmeralda District	Joseph R. Beard.	4 Armory Hall.	210,000	300	1	350	GUADALUPE	Chihuahua, Mexico.	Wm. Blackwood.	724 madison st.	140,000	500	1	none
MOUNT HOPE	Esmeralda District	Joseph R. Beard.	4 Armory Hall.	210,000	300	1	350	GOLD HILL O. M. & M. CO.	Gold Hill District.	Charles Prodt.	627 Front street.	50,000	500	1	none
SOLEDAD	Esmeralda District	Joseph R. Beard.	4 Armory Hall.	210,000	300	1	350	GOLD HILL O. M. & M. CO.	Gold Hill District.	Charles Prodt.	627 Front street.	50,000	500	1	none
COOPER HILL	Esmeralda District	Joseph R. Beard.	4 Armory Hall.	210,000	300	1	350	GOLD HILL O. M. & M. CO.	Gold Hill District.	Charles Prodt.	627 Front street.	50,000	500	1	none
MADISON	Esmeralda District	Joseph R. Beard.	4 Armory Hall.	210,000	300	1	350	GOLD HILL O. M.							



**Volcanic Smelting Furnace.**

PERSONS DESIRING INFORMATION AS TO THE USE of a economical properties of this Furnace, and intending to make use of the same, when satisfied of its superiority over all other means of reducing ores, and separating metals from the sulphurets, can obtain an explanation and advice in regard to the same, and the terms of sale of rights to use the same, on application of J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietors through the Post Office of San Francisco. The drawings may be seen at the office of J. D. Stevenson, No. 814 Market street, or at the office of T. Ogg Shaw, in Brannan's Building, Montgomery street.

The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form.

The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of capacity for smelting one ton of ore or more, on signing an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention or a longer period than two months.

Feb 16 MRS. E. J. HALL, M.D., Proprietress.

**New Style of Lady's Buckle.**

W. BOHM, INVENTOR & PATENTEE

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It excels all other buckles in

**Usefulness, Strength and Appearance.**

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of

BRADYMAN & LEVY,  
621 Washington street, San Francisco.  
JOSEPH, BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento,  
Agents for the Patentee.

Every Buckle sold will be guaranteed as to its Strength and Durability.  
W. BOHM, Patentee.

## LEANDER RANSOM, Civil Engineer AND SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS.

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

**CROCKERY,**

GLASS WARE,

**FRENCH CHINA,**

Coal Oil Lamps, Table Cutlery,

**CLOCKS,**

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET,

[CORNER OF MERCHANT,]

no16

SAN FRANCISCO.

## MYERS & DAGGETT'S Mining and Stock Exchange,

No. 233 B Street, Virginia City, N. T.

Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* \* Abstracts of Titles Furnished, Etc.

## FREDERICK MANSELL, MECHANICAL & ARCHITECTURAL DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorff.

Drawings of MODELS made for parties applying for patents at Washington or London.

## A. ROMAN & Co., WHOLESALE AND RETAIL

Book Establishment,  
417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigot on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying, by Phillips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guides or Practical directions to Assayers, Miners, and Smelters.

Practical Assaying, by Michell.

Ivory Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Wessbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Prescotes' Chemical Analysis.

Together with many other works in this and similar lines

Books imported to order on short notice.

A. ROMAN & Co.

417 & 419 Montgomery Street.

**READ THIS!**

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences. [Evening Bulletin, Aug. 4.]

**THEN THIS!****Comet Illuminating Oil!**

Manufactured expressly for Stanford Bro.

THIS POPULAR

**Brand of Kerosene**

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

**Zur Beachtung für Erfinder.**

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Stizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

**Gird's Budding Knife.**

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. 7.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentee.)

sepl-3m San Francisco

**SQUARZA'S PUNCH.**

WHOLESALE AND RETAIL,

No. 44 Leidsdorff st., near Sacramento.

**The Occidental Hotel**

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic side. The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**

AND A LARGE

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office, Connecting with all the lines throughout the country.

Proprietors, of

San Francisco, Jan. 1st, 1863.

**MUSIC! MUSIC!!**

A. KOHLER,

IMPORTER OF EVERY DESCRIPTION OF

Musical Instruments & Musical Merchandise

SHEET MUSIC & MUSICAL BOOKS.

GENUINE ROMAN STRINGS, &c.,

Light's New Patent Insulated Iron Frame

is put into all of

LIGHTS & BRADBURY'S OVERSTRUNG PIANOS.

Wherever these instruments are known they

RANK AS THE FIRST AND BEST

Intone, delicacy of touch and durability.

All the leading Musicians of the country have

testified to their superiority.

A. KOHLER, Agent for the Pacific Coast.

MELODEONS AND HARMONIUMS,

FROM THE CELEBRATED MANUFACTORY OF

MASON & HAMLIN,

Warranted superior to all others.

Send for a catalogue and Price list.

oct A. KOHLER, Agent.

**To Mill Owners.**

WANTED, by a person fully competent to the position, a situation as MINING SUPERINTENDENT in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience, in Cornwall, as an Assayer, a Machinist, a Draughtsman, a Surveyor and an Assorter of Copper Ore. He can give ample testimonials as to his capacity for the position he seeks.

Apply at this Office. \*

**W. T. & J. GARRATT,****City Brass and Bell Founders**

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE

and Lift Pumps, Church and Steamboat Bells, Tavern

and Hand Bells and Gongs, Hose and all other joints,

Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,

HYDRAULIC PIPES and NOZZLES for MINING PURPOSES.

Iron steam pipe furnished with fittings, &c.,

COUPLING JOINTS OF ALL SIZES. Manufacturers of "Gar

ratt's Patent Improved Journal Metal."

**SQUARZA'S PUNCH.****FIRST PREMIUM**

AT THE SACRAMENTO AGRICULTURAL STATE FAIR

FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

## LATEST IMPROVEMENT in Ladies' Buckles.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERIK REICHEL,

Manufacturing Jeweler,

620 Merchant street, San Francisco.

## GREAT REDUCTION IN PRICES.

**STANFORD BROTHERS,**

121, 123 and 125 California street,

Keep the Largest Stock of all Kinds of

**Lamp Stock**

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. apl6it

## 50 lbs. MARINE AND Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. Fouquet, Superintendent.

WORKS, North Beach; Office, 318 California st., San Francisco.

**WRIGHT'S PICKS.**

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

**REMOVAL.**

OFFICE OF THE PACIFIC METAL Surgical Office is removed to 318 California street having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers, or Silversmiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments.

S. C. BRADSHAW, Agent,

318 California street, near Sansome,



## SPECIAL NOTICES.

**Schmeltzer Gold and Silver Mining Company.**—At a meeting of the Board of Trustees of this Company, held April 11, 1893, an assessment of 25 cents per share was levied, payable in United States coin, to the Secretary, at the office of the company, No. 600 Montgomery street, on or before FRIDAY, April 17, 1893.  
ap20.1m M. G. ELMORE, Secretary.

## To Mine Owners.

**PARTIES having a Good silver Mine** and wishing for Machinery to work it for an interest in the Mine Will do well to apply at this office. No organized company need apply.

## John R. Sims,



Oregon street, between Washington and Davis and Front and Jackson streets, San Francisco.

**Manufacturers of Fire Proof Doors and Shutters.** Bank Vaults, Grading, Cemetery Railings. All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch. Mr. Sims appreciates the past liberal patronage of his friends, and trusts that he may continue to merit it in the future. For the information of strangers he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which has superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attest. A large assortment of second hand shutters for sale at low rates. ap13

## WANTED,

## GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,

By FRONTIER A. DEVERCY,

13 ap 487 Pine street, San Francisco.

## New Patent Agency.

**WE HAVE CONNECTED WITH THE** Publication of the "Mining and Scientific Press"

## The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

## Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco. EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building. EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terras moderate. EWER & SMITH.

## PATENT RIGHTS.

**Patent Rights Bought and Sold,** At the office of the "Mining and Scientific Press" Agency. EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions Illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

## The Pacific Patent Agency

**HAS BEEN REMOVED** to No. 625 Merchant street, to the office of  
Wm. LOEWY, Esq., Attorney at Law.

## P. M. STEAMSHIP COMPANY.

## NOTICE.

**Until further notice, the Steamers of** Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above date fail on Sunday, the steamer will be dispatched on the following Monday.  
A. B. FORBES, Agent.

## FULTON FOUNDRY &amp; IRON WORKS

## HINCKLEY &amp; CO.,

MANUFACTURERS OF

## Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,

FIRST STREET,

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* \* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done. PATTERNS MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. Wm. E. WORTH. Wm. A. FIELD.

## TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

## THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will Save in Transportation Material and Labor, from 25 to 50 per cent. of the entire cost of the Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

ap2. This Wheel is fully GUARANTEED. Jan 19-1f

## Agency For Patents.

**THE UNDERSIGNED** having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

**WETHERED & TIFFANY,**  
Office, 410 Montgomery street.

CHARLES R. BOND, (late City and County Assessor.)

## REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

Real Estate Purchased and sold, and Loans Negotiated.

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
nol6-1f ZENAS WHEELER.

## PEOPLE'S Steamship Line! CONNECTING CALIFORNIA AND NEW YORK, VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**

J. H. BLETHEN.....COMMANDER,

Will be dispatched for

**San Juan del Sur,**

From Mission street Wharf, Punctually at 9 o'clock, A. M., on

WEDNESDAY, - - - APRIL 22, 1893.

Connecting at GREYTOWN with the Splendid Steamship **ILLINOIS**.....2500 Tons.

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route. These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to  
L. K. ROBERTS, Agent,  
a20 No. 407 Washington Street, opp. Post Office.

## P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of April, 1893.

April 13th, - - - - Steamer Golden Age.

April 22d, - - - - Steamer Sonora.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.  
je4 Corner of Sacramento and Leidesdorff sts.

## Miners' Foundry

—AND—

## MACHINE WORKS,

First St., between Howard & Folsom,  
SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS MACHINERY**, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* \* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING.  
San Francisco, February 23, 1893.

## DONAHUE'S

## Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

**MANUFACTURE STEAM ENGINES, SAW AND GRIST Mill Machinery, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices.** Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.  
PETER DONAHUE

## PALMER, HANSCOM &amp; CO.,

## GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kind.

ALSO:

GENUINE WHITE IRON SHOES AND DISS.

PALMER, HANSCOMB & CO.

## To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST

**THE ABOVE COMBINATION SECURES THE MOST** complete amalgamation of the precious metals in any process now known.

By it steam is introduced in the most effective and economical manner, while it is peculiarly adapted to catching floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubes, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

## VULCAN IRON WORKS CO.

P. TORQUET.....MANAGER

R. IVERS. C. R. STEIGER. S. AITKEN.

## Steam Engine Builders,

Boiler Makers, Iron Founders and General Engineers,

Nos. 137 & 139 FIRST STREET, - - - - SAN FRANCISCO

STEAMBOAT MACHINERY built and repaired; also Saw Flour and Quartz Mills, Pumping and Mining Machinery etc., etc., etc.

Proprietors of Morse's Patent Fire Grates, JOYAL, FOURNEYTON and other Turbine Water Wheels with latest improvements.

## DEETKEN'S

## Chemical and Metallurgical Works

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for its purpose.  
nov8-3m

## LEWIS COFFEY AND RISDON,

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment of the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted a to quality.

Old Stand, corner Bush and Market Streets Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

## JAMES PHELAN,

(LATE J. & M. PHELAN.)

IMPORTER AND JOBBER,

## Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,  
Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited  
TERMS LIBERAL. Jan. 1-1f.

## THEODOR KALLENBERG

Maker of Models  
FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; steel stamps, Dies and Die Sinking, Embossing Stamps.** Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
n7.3m San Francisco.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, APRIL 27, 1863.

NO. 26.

#### TO CITY SUBSCRIBERS.

The experience of the past four or five months has proved the impossibility of a regular and prompt delivery of the MINING PRESS to city subscribers by any carrier, who has no other interest in his business, than to simply get through his routes, and draw his weekly pay. So much complaint has been made, that we have concluded to adopt the universal custom in this city, of placing our routes in the hands of a carrier, whose interest in it shall be to increase instead of curtail them, and who, for such reason, will be very likely to attend faithfully and punctually to his duty. We have made this arrangement with a party upon whom both ourselves and our subscribers can rely. Many of our subscribers have already expressed the desire that we should adopt, in their cases, the usual custom of calling upon them monthly for their subscriptions, and as it is desirable that the arrangement should be uniform, our carrier will call upon all others during the week, and such as are willing to become monthly subscribers can do so and settle with the carrier, for all arrearages. Our large and rapidly increasing city list renders it necessary that we should employ a man to devote his entire attention to it. We trust the arrangement will meet the approbation of our patrons.

**SILLIMAN'S JOURNAL.**—We have received the March number of the *American Journal of Science and Arts*, edited by B. Silliman, B. Silliman, Jr. and James D. Dana. This publication has now reached the 45th year of its existence, and is a standard work on all matters pertaining to science and arts—the only Journal of the kind on the Continent. It is made up of original papers and abstracts of foreign discoveries in physical and chemical science, geology, mineralogy, metallurgy, natural history, etc. It is a matter of congratulation among men of science, everywhere, that this standard publication has been able to stand the pressure of this extraordinary epoch, and continue its regular appearance even after it had been curtailed in circulation by the loss of a very large portion of its patrons who were dwellers of the Southern States. The number before us contains a valuable collection of papers, embracing within their range nearly every department of science and arts. This work is published every other month, by Silliman & Dana, at New Haven, Conn., for \$5.00 per year—each number containing 152 pages.

**REMOVALS.**—The office of the Lady Bryan G. & S. Co. has been removed to 605 Sacramento Street.

**M. G. ELMORE,** Mining Stock Broker, has removed his Office to No. 528 Montgomery St.

THE "Supplement" to the *News Letter*, forgets to credit the Press with the article entitled "Amalgamating Gold and Silver by Electricity," which it copies.

**BLACK INK.**—We have received a sample of "Pilkington's Black Ink," a very superior article and said to withstand the action of acids. It can be purchased at the corner of Montgomery and California Sts.

#### PROGRESS OF THE MINING INTEREST.

We continue our notices of mining progress in various sections of the State and adjoining territories. It is only by consulting such facts as we here lay before our readers that persons can act with judgement in their investments in progressive mining stocks. In a dividend paying mine, all that a purchaser cares especially for knowing is that the company is paying a regular percentage upon its capital stock. He then invests at a price per foot or share upon which the usual dividend will afford him a percentage which he considers an equivalent for the use of his money. He is a poor business man, who seeks an investment in an unproductive mine, without first informing himself as to its condition and the progress which has been made in its development. We shall hereafter devote a large space in our columns, and whatever time may be necessary, to collect all attainable information which may properly come under this head. We intend to make such information as reliable as possible, and our readers by filing their papers will soon have in their possession every material fact connected with the progress and development of every mining company which has an office in this city, and so far and fast as we can obtain reliable data, we shall also report progress upon all other companies, wherever on the Pacific Coast they may be located, or wherever their official place of business may be. In obtaining this information, we shall, of course, as a general thing, be compelled to take for our authority the statements of others, and whenever any misstatement or omission may be noticed we shall esteem it a favor in any one who will call our attention to it, and furnish us with the correct facts in the case.

#### VIRGINIA MINES.

**BURNING MOSCOW.**—This company is now employing about 20 men. They have a steam engine upon the ground for hoisting purposes, and the management of the mine has recently been placed in charge of a new Superintendent, Mr. Philip Deidesheimer, formerly Mining Engineer of the Ophir Co's mine. The mine is worked by an incline upon the vein, which yields good ore at a depth of about 70 feet. The prospects of the mine are such as to warrant a vigorous prosecution of the work. Drifts are now being run for a thorough development of the mine.

**WHITE & MURPHY.**—This Company has recently made arrangements for an immediate opening of the mine through the Latrobe tunnel.

**DESERT.**—This Company, situated in the Flowery district, near Virginia City, is not far from, and is supposed by many to be an extension of the Lady Bryan. But little has been done toward its development until recently. The Company has now however taken the necessary steps for its development by running a tunnel, sinking a shaft, etc.

**LADY BRYAN.**—Considerable attention has of late been directed to this mine in consequence, probably, of the appearance of some very rich ore in a new shaft which was being sunk upon the vein. The present condition of this mine is very clearly given in the following extract from the report of

Mr. Charles Bonner, Mining Engineer, to Mr. Teschemacher, President of the Company:—

"The general geological formation of the District is precisely similar to that of the Comstock vein. The outcrop of the vein is an immense mass of quartz, from 100 to 150 feet wide, of a good character, running in a northerly and southerly direction. The tunnel has been driven through the vein at right angles to its course, and passes through a similar thickness of quartz to that at the out-crop. But the quality of the rock indicates that it will have to be followed to a greater depth before good results can be expected.

The shaft now being sunk where some rich ore was cut recently, is in the Western Lode, intersected by seams and bunches of quartz, some of which contain very rich ore. The quality of the ore discovered in the shaft is excellent, but limited in quantity—a proof of the existence of rich ore in the vein at increased depths. The shaft now sunk is not at the place where the vein can be worked to advantage, and recommends a new shaft to be sunk in a westerly direction, to a depth of 1000 to 150 feet, at a point indicated by him to Mr. Owens, the Superintendent, and that an Engine, Pumps, and Working Gear, for hoisting rock, be immediately provided—an expense undoubtedly warranted from the present appearance of the vein."

#### ESMERALDA MINES.

**RIP VAN WINKLE.**—This Company is sinking a prospecting shaft, which, by last reports was down 35 feet. As soon as the ledge is reached prospecting operations will be commenced.

**BODIE BLUFF CONSOLIDATION.**—This Company are actively engaged in developing their several ledges. By last reports their shaft on the new Mexican ledge had reached a depth of 125 feet—on the Isabella they were down 90 feet; a shaft had also been commenced on the Osceola. We shall speak more fully of this in our next issue.

THE BODIE AND SILVER HILL CONSOLIDATION Co. has been organized by a consolidation of the Rising Sun, Grotto, El Dorado, and Climax Lodes. The Company has commenced operations on the several lodes, by tunnels and shafts.

THE JACK HAYS, SAM PATCH, SAN FRANCISCO AND TENNESSEE COMPANIES, are all recent Organizations in Esmeralda having their offices of business in this city. Active operations have been commenced upon each, by sinking shafts of suitable depths for an approximate development of them. We shall soon be able to report progress.

**WILLOW SPRINGS EXTENSION.** Middle Hill, are working their claim night and day and taking out ore said to be very rich.

**COSO S. M. Co.** This Company, whose lodes are located in Coso District, have their mill about completed, also the road to their mine. In a short time the rock from their various ledges will be tested by a practical working process.

#### SLATE RANGE.

THE CAYUGA, BLUE RIDGE, MADISON AND SAN FRANCISCO, all in the new Slate Range District, are in progress of de-



## VALUABLE ALLOYS.

**SILVER STEEL.**—One part silver, 500 parts steel, according to Faraday and Stodan. This alloy would be superior to the best steel. Steel also combines with other metals, such as nickel, platinum, manganese, &c.

**COPPER AND ANTIMONY.**—Seventy-five parts copper, and 25 parts antimony. This alloy is brittle lamellated, of a violet color, susceptible of a fine polish, and is more fusible than copper.

**BISMUTH AND LEAD.**—One part of bismuth, and 1 part of lead, a very tenacious alloy, melting at 165° Centigrade equivalent to 370° Fahrenheit.

Two parts of lead to 1 part of bismuth gives an alloy which dilates powerfully at the time of cooling. (This property makes it extremely suitable to all castings in which the greatest sharpness and finish are desirable.)

**BRILLIANTS OF FAHLUN.**—Thus called, are made from 29 parts of tin, and 19 parts of lead. A very fusible and brilliant alloy.

**TIN AND ZINC.**—One part tin, and one part zinc, is almost as tenacious as brass, and melts at 460° to 500° Centigrade, 900° Fahrenheit.

**TIN AND IRON.**—These two metals may be alloyed in all proportions. 35 parts of tin to 55 parts of iron form an alloy of a clear crystalline gray, and so brittle that it may be reduced to an impalpable powder.

**ANTI-FRICTION METALS.**—Many use 9 and 10 parts tin to 1 part copper. A superior composition to either of the above is, 1 part copper, 1 part regulus of antimony, to 10 parts of tin. Melt the copper first, then add the antimony, with a small portion of tin; cover up the whole with charcoal for a short time prior to casting; add the remainder of the tin. The compositions are solely used for lining brass bearings.

**FINE BRAZING SOLDER.**—Twelve pounds of copper, 11 pounds of zinc flux with powdered brimstone.

**A NEW GUN METAL.**—James T. Ames, of Chicopee Mass., has received a contract to furnish two guns to the Navy Department, which shall be made of a composition of metal of his own invention. It has borne an explosive force of 80,000 pounds to the square inch.

**INDIAN STEEL.**—The steel made in India is of such good quality that not only are Indian swords made from it, but the best of Persian swords likewise; and it is believed that the vast monuments of ancient Egypt must have been cut with tools made of Indian steel, in respect to the hieroglyphics on the intensely hard porphyry and syenite.

This Indian steel appears to be made from the magnetic oxide of iron. The ore is stamped to fragments, and the adherent quartz is separated by washing and sifting. The smelting is effected in the most primitive way; the furnace is built of clay, and not more than four or five feet high, the bellows is formed of two goat skins, with a bamboo nozzle, tipped with a clay tube at the end which is to be nearest the fire; the fuel is charcoal. The iron produced by the appliances is such as our manufacturers of steel would treat with little favor, but the Hindoo manages to obtain most excellent steel from it. The iron is heated to a slow red heat, and is beaten for a long time with a stone hammer on a stone anvil, the Hindoos having an opinion that iron implements are injurious. To convert this hammered iron into steel, it is broken into small pieces, and put into small crucibles with a little dry wood; the crucibles are stopped up with clay, and are put into a furnace where they are entirely covered with charcoal. A blast is then applied for two or three hours, the crucibles are removed, allowed to cool, broken and the metal is in a proper state to be fabricated into any desired form.

**WHITEWASH.**—This article as ordinarily made, rubs off the walls after it becomes dry, soiling clothes and everything coming in contact with it. This may be obviated by slacking the lime in boiling water, stirring it meanwhile and applying after dissolving in water, white vitrol, (sulphate of zinc,) in proportion of four pounds to a barrel of whitewash, making it of the consistency of thick milk. The sulphate of zinc will cause the whitewash to harden, and prevent the lime from rubbing off. A pound of white salt should also be put into it.

This makes the best whitewash known.

## NATURAL HISTORY.

A most important enterprise—important in a scientific light—has been recently undertaken by the friends of science in Nebraska. A company has been formed under the name of **THE ROCKY MOUNTAIN NATURAL HISTORY EXPEDITION**, to explore the Rocky Mountain region. Its originators are citizens of Nebraska, residing on the border of civilization, and almost adjacent to the proposed field of exploration and research.

It is the determination of the expedition to make complete collections of plants, dried and alive; seeds, cuttings and grasses; of birds of their skins and eggs; of shells and fossils; of skins of large animals, their bones and skulls; insects, fishes, minerals, etc. The expedition possesses all the necessities for collecting, curing, packing and transportation.

A Botanist, Naturalist, Geologist, and Taxidermist, will accompany the expedition, and make full and complete collections in their respective branches. There will be established in Nebraska City, a depot, where collections will be forwarded, as soon as sufficient quantities are collected for transportation. It is expected that the expedition will occupy three years, or until a thorough research is made of the Territory named. Subscribers, and those identified with the expedition, will receive their specimens annually, from the depot at Nebraska City. The expense attending an outfit so complete as this will be, makes it necessary that they receive aid from subscribers. Those who remit \$10 will receive a certificate of Membership and a collection. A Corresponding Secretary has been secured for the States, who will advise the subscribers of the success of the expedition from time to time. The expedition is expected to start for the mountains about the first of June, 1863.

Remittances should be made in Treasury Notes, by mail to R. O. Thompson, Secretary and Treasurer, Syracuse, Otsego County, Nebraska Territory.

That there is a field of deep interest to the Botanist, Naturalist and Geologist, in the Rocky Mountain regions of North America, has been already demonstrated by the collection of rare Plants, Birds, Insects and Fossils, that have already found their way to civilization from that quarter.

The Natural History of the Rocky Mountains within the Territories of Utah, Colorado, and New Mexico, is yet but partially developed, and it is to be hoped that this expedition to fully explore that region will be eminently successful in placing its Natural History before the people of the United States, in so complete a record that Science will receive a lasting benefit therefrom.

**THE HARRIS LEAD** at Brown's Valley, about 10 miles east of Marysville, has been in active operation since August last. The mill has all the modern improvements in machinery, and is paying at the rate of from \$4,000 to \$6,000 per month, above expenses. The entire property, we understand is owned by H. Harris, of Marysville. Quite a town has sprung up about the works and a neat church is soon to be erected, all through the enterprise and liberality, directly or indirectly, of Mr. Harris.

**PREVENTION OF DAMP IN GROUND FLOORS.**—Until recently no provision was made to guard against the absorption of moisture in the foundation walls of a house; lately, every working bricklayer knows that by the use of a single layer of slate (fixed in cement,) ever so little above the ground range of a foundation, the rise of damp in walls is repressed. What a catalogue of evils is avoided by this simple provision! The servants of an establishment are saved from all the penalties which damp walls are sure to entail upon the occupant of a basement story; all the aches to which the human constitution is subject are at once obviated; and apartments which, built on the surface, were formerly damp some two or three feet upward, or if sunken only four feet below the level, were damp to the ceiling, are now perfectly dry and fit for sleeping-rooms.

**A NEW METHOD OF EXTERMINATING RATS.**—A person being much troubled with rats, and being determined to get rid of them, tried every possible plan but without success. At last he got a lot of rats, and shut them in a cage; they devoured one another till only a single one was left. He then turned this one loose, who, excited with the blood of his fellow rats, and having become a genuine cannibal, killed and ate all the wild rats he could find on the premises.

## SUCCESSFULLY AT WORK.

The London "Pneumatic Dispatch Company" has commenced forwarding mail-bags through its underground tubes. This enterprise is novel. The Pneumatic tubes which have been laid by the company extended from the Euston Railway station to the Northern District post office in Eversholt street, London, a distance of only about one third of a mile, but sufficient for experimental purposes. The tube resembles an elliptical gas-main, thirty-three inches high by thirty inches wide, and is laid in nine feet lengths, at an average depth of nine feet below the street level. The joints are filled in with lead so as to be perfectly air-tight. Within this tube runs a wrought iron car, eight feet long, weighing eight cwt., and fitted with four wheels, each twenty inches in diameter. At each end of the tube is a hollow iron wheel, working in an air tight box of twenty one feet in diameter, which is connected with a steam-engine of seventeen horse power. The wheel turns at a velocity of seventy or ninety miles an hour, when the air is drawn in through its hollow centre and thrown off from its periphery with a force that gives a pressure of from five to seven ounces on the square inch. The iron cars in the tube present a surface of nearly five square feet to the blast, and are propelled at the rate of thirty miles an hour.

The entire cost of a line of five miles is estimated at \$650,000, and it is proposed to carry freight as well as mails through London, at the cheap rate of a penny (two cents) a ton per mile. So far, the experiment is successful, and the results are very interesting and curious.

**RED INK.**—Common red ink is made in the most simple manner, by mixing common carmine with a sufficient quantity of aqua ammonia to flow freely from the pen. Any person can manufacture red ink in a few hours by this method. A cheaper red ink may be made by boiling two ounces of Brazil wood for half an hour in a quart of water, then straining it and adding half a drachm of the chloride of tin and one drachm of gum arabic. Such ink is used for ruling red lines on blank-books. Carmine ink does not affect steel pens like that made from Brazil wood; none but quill or gold pens, however, should ever be employed with red ink. Liquid Solferino (aniline red) also makes a good red ink.

**POOR PROPHETS.**—It is remarkable how many predictions of men of science, in regard to the practical utility of important discoveries, have signally failed of fulfillment. When Sir Walter Scott heard that it was proposed to light streets with coal-gas, he said: "It can't be done; it's only the dream of a fanatic." Sir Humphrey Davy, the eminent chemist, said, in regard to the same thing: "It's all nonsense. You might as well talk of lighting London with a slice of the moon, as to talk of lighting London with gas." When the subject of ocean steam navigation was first proposed, Dr. Lardner demonstrated, as he supposed, by elaborate calculations, that the matter was practically impossible. When Franklin announced the identity of lightning and electricity he was laughed at. When Morse proposed to send a telegraphic message between Washington and Baltimore, he was regarded as a fit subject for the lunatic asylum.

Here is a queer statement—but if true, a very important fact for housekeepers:—

**TO PRESERVE EGGS.**—Place half a dozen at a time into boiling water, or as many as you can lift out at once with a skimmer, and leave them in the water from five to six seconds, and they will keep fresh for any length of time. This process coagulates a thin film of the white next the shell, and renders it impervious to the air, which is the cause of the putrefactive stage,—the shell being porous, and by laying a short time in one position, the yolk displaces the white and comes in contact with it and spoils.

**CORPORATIONS IN MONO COUNTY.**—The Aurora Times says: The number of Incorporations in that County, inclusive to the 1st inst., for Gold and Silver mining and other purposes, numbered two hundred and forty-nine. Since then other companies have been organized. The present number is 267.

**COPPER.**—The excitement over new copper discoveries still continues in every portion of the State.



## LATEST FROM ESMERALDA.

We receive by private advices from Esmeralda most encouraging word with regard to the mines in that District. The mines are very generally improving as the workings descend. Our correspondent writes "As we go down the poor mines are the exceptions," and adds, "The Wide West Mill runs like a top—you need not fear to speak well of this District, as to the mines."

**SHIPMENT OF TREASURE.**—The following is the list of treasure shipped for the East per steamer Sonora of the 23 inst.:

To New York.....	\$302,046 58
To England.....	765,072 57
To Panama.....	27,600 00
Total.....	\$1,094,718 95

An OIL SPRING has recently been discovered in Colusa county, on the Coast Range, and a company has been formed in Marysville to thoroughly prospect and work the same. If it shall prove as extensive as anticipated. The spring is situated about a mile from Simmon's Hot Sulphur Springs.

## TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metalliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; that rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel, and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphureted ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

Our object is to furnish the miners of California with every class of information which shall be valuable to them in

the progress of their calling and in the development of the mineral resources of the State, and we know of no way in which we can devote a portion of our time more to the interests of miners than in the manner here proposed. The only equivalent we ask is that they shall do what they reasonably can to sustain and improve the paper devoted exclusively to their interests.

In carrying out the plan we propose, every miner and prospector should bear at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector; and we have the promise also, at an early day—probably within a week or two—of a series of articles under the head of "THE MINER'S LABORATORY," which will be prepared especially for this paper by one of the most skillful metallurgists on this coast, and which will be found of great value to the mining public.

## SAN FRANCISCO MINING NOTICES.

## ASSESSMENTS LEVIED.

Assessments upon Mining Stocks have been levied as follows:—

Garibaldi.—Assessment of \$1 per share, levied March 2nd.

Sutro.—Assessment of \$1 per share, levied Feb. 23, payable March 23.

Silver Quartz Mill Co.—Assessment of 5 per cent. levied Feb. 23, payable March 28.

Napoleon (copper).—Assessments of \$3 per share levied Mar. 3, payable in 30 days.

Golden Age.—Assessment of one dollar per share levied Feb. 24, payable March 26.

Washoe Gold & Silver.—An assessment of 2 per cent. on capital stock was levied Feb. 16, payable Apr. 1.

## GENERAL NOTICE

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home"? If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so for meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

## Mining and Scientific Press.

THE MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets, San Francisco, Cal. at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - - Proprietors.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Reproductions on wood, stone, copper, steel, etc. STENOGRAPHY and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Steam Engines, Ships or China or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader, and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefitted by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmer and Planter will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers:—Four Dollars per annum.

## Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## Our Mint, its Rules, Charges and Operations.

## For parting silver from gold when gold

is below 300-1000ths. fine..... 3cts per oz.  
" from 30-100ths. to 750-1000ths fine. 7 cts " oz.  
" " 750-1000ths to 950-1000ths " 14 cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.



velopment by shafts, etc. The shaft on the former is down 50 feet.

## HUMBOLDT.

Quite a number of Companies located in this region have recently been organized in San Francisco, and all are actively engaged in securing a proper development of their severnines.

The SHEBA, which was one of the earliest and is perhaps the best known mine in this district, is rapidly gaining in public favor. The ore from this mine is of a nature which will not yield to any of the various chemical processes now employed in this country for the reduction of silver ores. It can only be reduced by a process of smelting. It consists chiefly of an Antimonial Sulphuret of Silver, which, until this discovery, has ever been considered a very rare mineral, and, which we believe, has hitherto been worked only in Europe. The Sheba Company has 15 tons of ore now on its way to this city to be smelted here, with the view of fixing a per ton grade to which it may be assorted for the purpose of exportation for treatment in Europe. The lower tunnel, which is being run by this company and which we have described in previous numbers of the PRESS is now on the lead, and at a distance of 30 feet below the upper tunnel. The vein at this point is found equally as rich as in the upper tunnel. This new development has had the effect to considerably enhance the price of stock in this market.

THE STARLIGHT has shipped tools, etc., to their mine and will immediately commence the work of its development.

THE ESTRELLA DEL MONTE, THE MANHATTAN, THE COCHECO, THE SIEGEL AND ANNIE LAURA, late incorporations in this city, are all being prospected by tunnels and shafts, and their stock will doubtless soon acquire value in the market.

## REESE RIVER.

THE REESE RIVER CO.—This Company, the only location on Reese River, which has yet found its way to our mining table, is a consolidation of 16 different lodes, embracing an aggregate of 7880 feet, divided in 1200 shares of \$100 each. The Company has taken up 640 acres of timber land, 63 of which lie directly on the River. This location is directly on the Overland Route. Wells, Fargo & Co. have established an office in this neighborhood and a telegraph station is also about to be removed there. The Company's claims are made up as follows:—Little Giant 400 feet; National 480; American Eagle 600; Sigel 500; Stanton 400; Ericsson 300; Pony Extension 600; Lincoln 1600; Latham Extension 200; Overland 200; O'Neill 200; North Star 200; Oregon 200; Highland Mary 200; Black Rock 600; Cedar Hill 1200—Total number of feet 7880. The Company is now running a tunnel into Highland Mary, which at latest reports had progressed 190 feet. They will strike the ledge at a depth of about 400 feet. At 20 feet from the mouth of the tunnel they crossed a 15 inch lode which they think will pay well for working.

CALIFORNIA.

The MELONES & STANISLAUS Co., located in Calaveras County have recently struck ore of an extraordinary richness in a shaft at the depth of 35 feet. Some of this rock can be seen at the Company's Office, in Lucas & Turner's Building. The specimens are among the finest which we have ever seen. The rock is of a cream color, and shows gold all through the mass. One of the specimens shows a profusion of sulphurets of silver. This mine is in process of rapid development.

The ALAMEDA COAL Co. have their office in the same room with the Melones. This Company have eleven different veins or strata of coal included in their location. They are sinking a shaft, which has already reached a depth of 250 feet. They have some fine specimens of lignite at their office, which are indicative of a large vein, and which it is thought will improve as they go down, into a good quality of coal.

The SNEATH & CLAY GOLD MINE, recently opened, near Nevada City, appears to improve as the work upon the same progresses, surpassing all expectations, and surprising even the owners themselves. Developments, thus far, seem to indicate that this will prove one of the richest mines in the State, and will bear favorable comparison with the best in Nevada Territory.

The NEVADA QUARTZ MINING Co. makes the following favorable exhibit of their work for 1862 & 3.

	Tons crushed.	Ozs. Amal'm	Value.
1861-2.....	3,735	15,780	\$60,333
1862-3.....	4,785	17,655	67,305

LOWER CALIFORNIA & SONORA.

The GOBERNADORA S. M. Co., in San Antonio District, Lower California, are now taking out rich ore.

The MINA PRIETA Co., located in Sonora, Mexico, will have their machinery in operation about the 1st of July. The mine is now under the Superintendence of C. W. Boyington, Esq., late engineer of the Bensley Water Co. of this city. The Company has some 1500 tons of rock out, and about 90 men, mostly Mexicans, in their employ.

COPPER COMPANIES.

There seems to be no abatement, nor present prospect of abatement to the excitement in regard to Copper Mines. Not a day passes without bringing to our notice, either through the interior press, or through private channels, some new discovery or some wonderful development in mines already opened. It would be useless for us to attempt to chronicle all, or even half of the "discoveries" which we see reported; they would be of but little value to our readers. We have given from time to time such practical hints as we have thought would be of value to prospectors, most of which have been pretty generally copied by the interior papers. We have reason to believe that such paragraphs have been read with profit.

The Copper interest has now arrived at a stage of development which affords unmistakable evidence that it is soon to occupy a prominent position in the mineral resources of the Pacific coast. Several of the earliest discoveries have already arrived at a stage of productive value. Not less than 1200 tons of ore, assaying from 16 to 25 per cent, have been shipped from this port to Boston since the 1st of January. The principal part of this amount has been shipped by the Union company of Calaveras county, the balance from the Napoleon and Keystone.

THE UNION MINING Co., (not incorporated) hold 1950 ft divided into 13 shares of 150 feet, which are now held at a very high figure, with none in the market. The dividends of this mine are expected to reach \$20,000 per share, for the current year. No assessments have been levied by this company. The principal shaft at this mine is about 200 feet deep.

THE KEYSTONE is the first "extension" of the Union. The cost of opening the mine was \$24,000, which amount has already been realised. The mine is now in good condition, yielding about 100 tons of 20 per cent ore per month. It is an incorporated Company with 3000 shares. Its first dividend will soon be declared.

THE NAPOLEON COPPER CO. is located about four miles south of Copperopolis; it is an incorporated Company, with 2700 shares of one foot each. The assessments, thus far, have reached \$13,500, or \$5 to the foot. The stock is chiefly held in this city. The mine shows two distinct veins, and the ore is assorted to a grade of from 14 to 20 per cent. Large shipments of ore have already been made from this mine.

TABLE MOUNTAIN COPPER Co., Calaveras county, is now in active process of development. They have tunnelled 135 feet toward the vein, and commenced two shafts, one of which is down 112 feet and the other 45. Six hands are employed upon the work night and day.

THE ALTA Copper Company in Del Norte County is an incorporated association. The ore consists chiefly of Carbonates. Active operations are in progress for its development. The Company is already taking out ore of a good quality.

THE NEVADA COPPER MINING Co., near Grass Valley. We have already in a previous number of the PRESS, spoken of this Company as having struck very promising ore at a depth of 25 feet. It is incorporated in this city.

COPPER HILL MINING Co., is a newly incorporated Company which has recently commenced the development of its mine in the Solidad District, Los Angeles county. They have struck the lead in a shaft at the depth of 25 feet, with very excellent prospects.

THE OCCIDENTAL COPPER Co., in the same vicinity, have 20 men at work, driving a tunnel, sinking shafts, etc.

THE SOLIDAD G. S. & COPPER MINING Co., also in the same neighborhood, have let a contract for sinking a shaft 100 feet deep on their mine. They are now down 45 feet and are taking out ore rich in Gray Sulphurates of Copper. The company has three sets of hands at work night and day.—Mr. A. Woodside is Superintendent of the last named mines.

## AN IMPORTANT MOVEMENT

A joint resolution has been introduced into the Assembly to the effect that the State Geologist, the State Superintendent of Public Instruction, and the State Surveyor, be constituted a Board of Commissioners whose duty it shall be to report to the Legislature on or before the second Monday of December, 1863, upon the feasibility of establishing a State University, embracing an Agricultural College, a School of Mines, and a Museum, including the geological collection of this State, and that said Board report such facts and considerations as they may deem important in connection therewith.

We look upon the above as a most important movement. It is to be regretted that it was not made at an earlier day, so that something might have been accomplished in that direction during the present session. We look upon the suggestion as the most promising plan for diffusing valuable and practical information among the people, which has yet been proposed. It secures for the benefit of California the valuable donation of land given to this State in common with other States, for the establishment of an agricultural school. It will also give us a nucleus for the organization of a Mining School, which is one of the greatest educational needs of the State, and will render of practical utility the mineralogical and geological collections now being made by the State Survey.

MORE WONDERFUL DISCOVERIES are reported in the neighborhood of Reese River, the particulars of which have not yet been made public. We learn this fact from a letter written by I. J. Rolfe, Esq., for the Nevada *Democrat*, of which paper he is a joint proprietor. Mr. R., one of the parties interested in the discovery, is thoroughly posted in quartz mining. We are inclined to place some confidence in the reported discovery. Our confidence, however, would be vastly increased were we to hear that *our* patronymic had been recorded upon some of the first extensions of the richest of these discoveries. Mr. R. is writing some very interesting letters from that region, and joins in the universal acclaim of its wondrous mineral wealth.

## GENERAL MINING STOCK REPORT.

## REPORT OF SALES

**At the San Francisco Mining Stock Board.**

For the week ending April 18th, 1863.

[illegible]







## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value	shrs per foot.	ass'ts to date	Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office	Capital Stock.	Par Value	shrs per foot.	ass'ts to date
RUTH WINDSOR TUNNEL	Esmeralda District	T. L. Bibbins	305 Montg'm'y st	\$100,000	\$100	1	\$	MOHAWK, G. S. & Copper	La Paz, Colorado	G. J. Turner	606 Montg'm'y st	\$250,000	\$250		
ANTELOPE SPRING	Esmeralda District	T. L. Bibbins	305 Montg'm'y st	400,000	500	1	none	BLUE RIDGE MINING CO.	State Range	G. J. Turner	606 Montg'm'y st	240,000	100	3 ft	
JEFFERSON	Gold Flat Nev Co	T. L. Bibbins	305 Montg'm'y st	500,000	500	1	none	MADISON, STATE RAIL	State Range	G. J. Turner	606 Montg'm'y st	264,500	100	2 ft	
COOK	Esmeralda District	T. L. Bibbins	305 Montg'm'y st	60,000	100	1	none	SLATE RANG	State Range	G. J. Turner	606 Montg'm'y st	210,000	100	2 ft	
CSAR	Esmeralda District	T. L. Bibbins	305 Montg'm'y st	120,000	100	1	none	SLATE RANG	State Range	G. J. Turner	606 Montg'm'y st	195,000	100	2 ft	
SOTOGAME	Esmeralda District	T. L. Bibbins	305 Montg'm'y st	14,000	100	1	none	THEY	Virginia District	N. J. Shiverick	Mer. St. Mtny Bldg	600,000	500	1	15 ft
PERLA	Esmeralda District	T. L. Bibbins	305 Montg'm'y st	120,000	100	1	600	HAWLEY	Devil's Gate Dist.	C. Stevens	6 Parrots Building	880,000	400	1	2 1/2
RED WHITE & BLUE	Esmeralda District	T. L. Bibbins	305 Montg'm'y st	140,000	100	1	none	LEYBOW	Virginia Dist.	C. Stevens	6 Parrots Building	100,000	100	1	
LULLY OF THE WEST	Esmeralda District	T. L. Bibbins	305 Montg'm'y st	120,000	100	1	none	CLEAR CREEK	Eagle & Washo dis	C. Stevens	6 Parrots Building	1,100,000	500	1	
ESTER	Esmeralda District	T. L. Bibbins	305 Montg'm'y st	900,000	100	1	none	MASIDORA	Sanora, Mexico	F. H. Waterman	618 Merchant str	240,000	100	1	none
BULLION	Van Horn District	T. L. Bibbins	305 Montg'm'y st	300,000	100	1	none	ORDEIDA	Esmeralda District	E. Daniels	Cashier Custom Hs	600,000	500	1	none
LAUREL HILL Mining Co.	Tuolumne County	C. S. Higgins	410 Montg'm'y st	1,620,000	100	1	250	RHODES DIGGINGS Q. M. Co.	Sacramento County	G. Ve. Touchard	414 Montg'm'y st	570,000	400	1	2 1/2
CONCENTRATION	Russ District	C. S. Higgins	410 Montg'm'y st	990,000	50	2	5,275	SAM WRIGHT	Aurora, Mono Co.	E. Worth	547 Washington st	700,000	500	1	2 1/2
BUILLION	Russ District	C. S. Higgins	410 Montg'm'y st	45,000	50	2	1,700	F. CLAIR	Aurora, Mono Co.	E. Worth	547 Washington st	120,000	200	1	6
WHITE & MURPHY	Virginia District	J. P. Nourse	Lucas & Turners bldg	1,200,000	100	1	23,000	FEDERAL Union	Aurora, Mono Co.	J. F. Bailey	605 Sacramento st	300,000	500	1	6
MINNA PRISTA	Sanora, Mexico	J. P. Nourse	Lucas & Turners bldg	2,200,000	100	1	68,000	JOSEPHINE	Coso District	W. W. Lawton	400 Montg'm'y st	1,200,000	250		
BURNING MOSCOW	Virginia District	J. P. Nourse	Lucas & Turners bldg	480,000	100	1	45,000	JEWELL	Devil's Gate Dist.	John Armstrong	610 Merchant str.	120,000	200	1	8
BUCKEYE	Virginia District	F. S. Carter	416 Sansome st.	280,000	100	1	3,200	NEVADA COPPER Mfg. Co.	Grass Val. Nev. Co	John Armstrong	610 merchant str.	240,000	100	2	1 1/2
AMERICAN	Virginia District	R. L. Taylor	612 Washington st	150,000	100	1	1,050	CINCO SEÑORES	Sinaloa, Mexico	John Armstrong	610 merchant str.	600,000	200	2	none
FRANCES	State Range Dist.	A. H. Clark	522 Montg'm'y st	165,000	500	1	1,050	JACK HAYES	Esmeralda District	J. H. Blood	7 Montg'm'y Bldg	60,000	50	1	none
SLATE RANG	State Range Dist.	A. H. Clark	522 Montg'm'y st	1,500,000	150	1	none	THURMUSE	Esmeralda District	J. H. Blood	7 Montg'm'y Bldg	180,000	100	1	none
ROCHESTER	State Range Dist.	A. H. Clark	522 Montg'm'y st	315,000	150	1	none	SLATE PITCH	Esmeralda District	J. H. Blood	7 Montg'm'y Bldg	100,000	100	1	none
PALM DELPHIA	State Range Dist.	A. H. Clark	522 Montg'm'y st	815,000	150	1	none	FULTON	Esmeralda District	J. H. Blood	7 Montg'm'y Bldg	100,000	100	1	none
NEW YORK	State Range Dist.	A. H. Clark	522 Montg'm'y st	315,000	150	1	none	KOHLER BRO'S	San Antonio, L. C.	K. Kohler Bro's	Sansome street	24,000	100	1	none
CATARAUGUS	State Range Dist.	A. H. Clark	522 Montg'm'y st	315,000	150	1	none	LUCCINE MINING CO.	Gold Hill District	J. S. P. xon	47 Montg'm'y Bldg	900,000	500		
ALBANY	State Range Dist.	A. H. Clark	522 Montg'm'y st	315,000	150	1	4,200	MOUNT DIVING G. & S.	Virginia District	F. A. Fabens	712 Montg'm'y st	2,000,000	200	44 in	20.50
LADY BRYAN	Flowers District	J. F. Bailey	605 Sacramento st	500,000	100	1	5,000	PIONEER CO.	Esmeralda District	E. B. Holmes	712 Montg'm'y st	900,000	150	2	2 1/2
DESSERT M. Co.	Flowers District	David Wilder	605 Sacramento st	440,000	100	1	600	MINNIE	Coso District	E. B. Holmes	712 Montg'm'y st	450,000	100	1	2 1/2
ADULTIC	Humboldt, N. Ter.	J. H. Gager	Merch st, mnt bldg	120,000	100	1	60	MINNIE	Virginia District	R. T. C. xon	438 Montg'm'y st	800,000	500	1	none
EVERETT	Humboldt, N. Ter.	J. H. Gager	Merch st, mnt bldg	440,000	100	1	60	MISSOURI	Virginia District	P. B. Cornwall	608 merchant str.	800,000	500	1	none
NORTH STAR	Silver Mtn. mono.	J. H. Gager	Merch st, mnt bldg	200,000	100	1	60	SOUTH UTAH	Calaveras County	L. Francis	Lucas & Turner bldg	150,000	50	18 in	none
CRYSTOLITE	Humboldt dis. u. l.	J. H. Gager	Merch st, mnt bldg	300,000	300	1	1,380	MELONES & STANISLAUS	Alameda County	L. Francis	Lucas & Turner bldg	500,000	100	1	6 1/2
ESTRELLA DEL MONTE	Humboldt dis. u. l.	J. H. Gager	Merch st, mnt bldg	180,000	100	1	1,380	ALAMEDA CO. MINING CO.	Alameda County	L. Francis	Lucas & Turner bldg	500,000	100	1	6 1/2
MANHATTAN	Humboldt dis. u. l.	J. H. Gager	Merch st, mnt bldg	280,000	210	1	1,380	GOLD & CURRY	Virginia District	J. C. L. Wadsworth	Lucas & Turner bldg	2,400,000	500	1	4
LIVE OAK COPPER	Gopher, Calif. Co.	J. H. Gager	Merch st, mnt bldg	600,000	500	1	none	KATE	Humboldt Nev. Ter.	L. Francis	Lucas & Turner bldg	180,000	100	1	4
SIGLE	Humboldt, N. Ter.	J. H. Gager	Merch st, mnt bldg	600,000	500	1	none	OPHIR	Virginia District	Thos J. Lamb	Rm. 1, Express	5,040,000	300	12 in	none
OCCIDENTAL	Humboldt District	J. H. Gager	Merch st, mnt bldg	600,000	500	1	none	SANTIAGO	Silver City District	E. A. Reed	Cor. Bat. & Wash.	2,800,000	1,000	1	none
ANNE LAURA	Humboldt District	J. H. Gager	Merch st, mnt bldg	570,000	100	1	none	NOBLE COPPER MIN. CO.	Calaveras county	E. A. Reed	Cor. Bat. & Wash.	1,100,000	500	1	none
STARLIGHT	Humboldt District	J. H. Gager	Merch st, mnt bldg	570,000	100	1	none	NORTH POTOMI	Virginia District	E. V. Joice	Cor. Bat. & Wash.	550,000	250	1	2 1/2
ZETA	Esmeralda District	William Winchester	Arora, Mono Co.	120,000	100	1	4,500	NORMAN	Virginia District	J. H. Brewer	40 Montg'm'y Bldg	1,500,000	500	1	10 1/2
ALABAMA	Devil's Gate Dist.	J. O. Stouch	816 Sansome street	100,000	200	1	14,300	SERRA NEVADA	Virginia District	J. H. Brewer	40 Montg'm'y Bldg	1,500,000	500	1	10 1/2
WIDE WEST	Esmeralda District	S. P. Patten	522 Montg'm'y st	1,300,000	500	1	13,300	EARLY DAWN	Devil's Gate Dist.	J. H. Brewer	40 Montg'm'y Bldg	200,000	200	1	10 1/2
REAL DEL MONTE, cons.	Esmeralda District	S. P. Patten	522 Montg'm'y st	1,760,000	400	1	6,750	SCORPION	Virginia District	W. H. Martin	617 Clay street	400,000	100	2	12 1/2
ESMERALDA Mining Co.	Esmeralda District	S. P. Patten	522 Montg'm'y st	900,000	500	1	27,000	RUBY	Star District	W. H. Martin	617 Clay street	120,000	100	2	12 1/2
ESMERALDA, N. Extension	Esmeralda District	S. P. Patten	522 Montg'm'y st	1,600,000	500	1	1,000	SILVER CITY	Silver City	O. R. Olson, Jr.	Cor. Bat. & Bush	1,000,000	100	1	12 1/2
SILVER HILL, Consolidated	Esmeralda District	S. P. Patten	522 Montg'm'y st	600,000	500	1	4,500	SUCCESSOR	Gold Hill District	R. H. Waller	1 Montg'm'y bldg	240,000	100	1	28 1/2
ANTLOPE	Esmeralda District	S. P. Patten	522 Montg'm'y st	600,000	500	1	4,500	SILVER CITY Q. M. Co.	Genoa District	S. P. Vanduyke	127 Clay street	1,200,000	100	1	none
LOUISA	Flowers District	J. F. Pope	115 California st	200,000	100	1	8,400	ALBANY	State Range	W. H. Clarke	224 Montgomery st	270,000	100	1	none
ROGERS	Flowers District	J. F. Pope	115 California st	900,000	300	1	15,600	MORROW, East.	State Range	W. H. Clarke	224 Montgomery st	180,000	100	1	none
ALAMO	Devil's Gate Dist.	J. F. Pope	115 California st	300,000	100	1	17,900	ALBANY, East.	State Range	W. H. Clarke	224 Montgomery st	240,000	100	1	none
BELLA VISTA	Lower California	S. S. Sprague	Cor Cal & Sansome	72,000	500	1	2,800	MOUNTAIN VIEW	State Range	W. H. Clarke	224 Montgomery st	240,000	100	1	none
BRENDEN	Virginia District	C. Lovell	436 Jackson street	250,000	100	1	10,800	WASHINGTON	State Range	W. H. Clarke	224 Montgomery st	270,000	100	1	none
BAHNS	Virginia District	R. N. Van Brunt	706 Montg'm'y st	1,200,000	1000	1	14,400	SACRAMENTO, East.	State Range	W. H. Clarke	224 Montgomery st	270,000	100	1	none
IOWA	Virginia District	R. N. Van Brunt	706 Montg'm'y st	1,250,000	100	1	10,800	SANTA ROSA	Virginia District	Nelson Hudson	Front street	1,200,000	500	1	6
LATROBE TUN & Mfg Co.	Virginia District	R. N. Van Brunt	706 Montg'm'y st	80,000	50	1	350	SACRAMENTO	Virginia District	J. F. Moore	108 California st	240,000	100	1	none
NORTON	Virginia District	R. N. Van Brunt	706 Montg'm'y st	1,200,000	100	1	350	WALKER & S. Mining Co.	Calaveras County	M. G. Elmore	508 Montgomery st	510,000	300	2	6
RESE RIVER	Reese River District	R. N. Van Brunt	706 Montg'm'y st	1,200,000	100	1	350	TABLE MOUNTAIN COP. CO.	Calaveras County	M. G. Elmore	508 Montgomery st	787,000	250	1	none
SAR MARCEL	Sanora, Mexico	R. N. Van Brunt	706 Montg'm'y st	1,200,000	100	1	350	COLUSA G. & S. M. Co.	Esmeralda District	M. G. Elmore	508 Montgomery st	900,000	500	1	3
SAVAGE Mining Co.	Virginia District	G. B. McAnney	712 Montg'm'y st	1,500,000	1000	1	350	RIO VAN WINKLE G. & S.	Esmeralda District	M. G. Elmore	508 Montgomery st	300,000	250	3	8
CALIFORNIA	Virginia District	G. B. McAnney	712 Montg'm'y st	1,500,000	1000	1	350	SCHNEITZER	American dis Hum	M. G. Elmore	508 Montgomery st	300,000	100	2	1
CENTRAL	Virginia District	G. B. McAnney	712 Montg'm'y st	1,500,000	1000	1	350	SAN FRANCISCO G. & S. M. Co.	San Francisco	M. G. Elmore	508 Montgomery st	1,400,000	500	1	1
ORDAR HILL m. & T. Co.	Virginia District	C. F. Barrington	509 Sacramento st	1,000,000	300	4	54,000	FLOWERY MILL COMPANY	Flowers District	James Peck	107 Sansome st.	100,000	100	1	none
CHOLEAR	Virginia District	W. F. Dean	53 Montg'y Block	1,680,000	300	4	54,000	FOUNDATION M. & T. Co.	Esmeralda District	A. Davidson	Oakland	450,000	750	10 ft	4
CHENANGO	Silver City	W. E. Dean	53 Montg'y Block	350,000	250	1	2,800	FRANCISCO AMERICAN	San Antonio L. Cal	J. A. Gould	508 Montgomery st	450,000	100	1	none
CROWD POINT	Gold Hill District	J. H. Jones	321 Front street	1,200,000	100	1	2,100	GANDOLFO	Chihuahua, Mexico	Wm. Blackwood	724 merchant st	500,000	500	1	none
CHARLES CALEY	Devil's Gate Dist.	Gomer Evans	338 Montg'y st	54,000	30	3	1,500	GOLD HILL O. M. & M. Co.	Gold Hill District	Charles Puda	627 Front street	50,000	500	1	none
CORCORAN	Esmeralda District	James Neary	326 Clay street	60,000	100	1	2,100	GVERNOR NYE	Devil's Gate Dist.	George M. Blake	426 clay street	900,000	400	1	4
EMERY	Esmeralda District	James Neary	326 Clay street	60,000	100	1	2,100	GOLD HILL UNION MILLS	Gold Hill District	J. F. Sterling	327 commercial st	120,000	200	1	none
DOYLE	Esmeralda District	James Neary	326 Clay street	60,000	100	1	2,100	GREAT WESTERN M. Co.	Calaveras County	Barely Hayley	Express Building	180,000	100	1	none
ISAACS	Esmeralda District	James Neary	326 Clay street	60,000	100	1	2,100	HOPE MINING COMPANY	Gold Hill District	F. W. Gross	712 Montg'm'y st	140,000	100	2	none
KOHLER	Esmeralda District	James Neary	326 Clay street	60,000	100	1	2,100	HOT & NORRESC	Virginia District	J. F. Light	Metropolitan Bldg	140,000	500	2	10 1/2
LIVINGSTON	Esmeralda District	James Neary	326 Clay street	60,000	100	1	2,100	PONCA	Virginia District	J. F. Light	Metropolitan Bldg	140,000	500	2	10 1/2
VIBRAD	Esmeralda District	James Neary	326 Clay street	60,000	100	1	2,100	CARRIE BELL	Esmeralda District	Wm. L. Duncan	Pioneer Building	140,000	100	1	1 1/2
LAS CRUCITAS mining co.	Mexico	C. J. Brennan	Cor J. C. & Frit	225,000	125	1	400	RAYFLOWER	Esmeralda District	Wm. L. Duncan	Pioneer Building	180,000	100	1	1 1/2
DANS	Esmeralda District	Joseph R. Beard	4 Armory Hall	1,600,000	200	1	400	FALLS OF CLYDE	Esmeralda District	Wm. L. Duncan	Pioneer Building	600,000	100	1	4 1/2
LITZ DALE	Esmeralda District	Joseph R. Beard	4 Armory Hall	240,000	300	1	400	C. CHECO MINING CO.	Humboldt District	N. B. Mulville	616 Montg'm'y st	400,000	100	1	10 1/2
MANMOUTH, No. 1	Esmeralda District	Joseph R. Beard	4 Armory Hall	240,000	300	1	400	CALEDONIA	Gold Hill District	W. B. Agard	412 Front street	220,000	100	1	1 1/2
MOUNT HOPE	Virgin, & Gold Hill	Thos Brownjohn	621 Clay street	1,000,000	500	1	230	GLYPSOLITE	Virginia District	Henry Toomey	Cor. mont & cal. st.	160,000	500	1	8 1/2
SOLADAD	Soledad Dis. Los A	George B. Russell	636 Sacramento st	780,000	100	1	230	EL TORADO	Virginia District	Henry Toomey	Cor. mont & cal. st.	240,000	100	1	10
COPPER HILL	Soledad Dis. Los A	E. Barry	636 Sacramento st	840,000	100	1	230	HAZ							



**Volcanic Smelting Furnace.**

PERSONS DESIRING INFORMATION AS TO THE USE of a economical properties of this Furnace, and its ability to make use of the same, when saturated of its capacity over an other means of smelting ores and refining metals from the sulphurates, can obtain all the explanation and advice in regard to this same, and the right of rights to use the same, on application to J. B. Stevenson, or T. Ugg Shaw, or by letter to the office through the Post Office of San Francisco. The agents may be seen at the office of J. B. Stevenson, 214 Merchant street, or at the office of T. Ugg Shaw, Finance Building, Montgomery street.

The time required for reducing ores by this Furnace in three fourths hours, and the amount of fuel only one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form.

Attention of all interested in the subject is requested to examine the important results obtained by this process.

Persons wishing will be allowed to erect a trial Furnace of capacity for smelting one ton of ore or more, on obligation to pay the usual fee for the right to it, should they continue to make use of the invention a longer period than two months.

Feb 16 MRS. E. J. HALL, M.D., Proprietress.

**New Style of Lady's Buckle.**

BOHM, INVENTOR & PATENTEE

THE SUBScriBER HAVING OBTAINED LETTERS PATENT on a Washington for an improvement in the construction of Ladies' Buckles, is now ready to turn out the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and the Patent has been granted for 17 years.

Advantages of other Buckles in

Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine the Buckle at the Jewelry Establishment of

BRAYFERN KLEVV,

621 Washington Street, San Francisco.

JOSEPH BROTHERS,

607 Montgomery Street, San Francisco.

FLORENCE & COMPANY,

118 1/2 Street, Sacramento.

Agents for the Patentees.

Every Buckle sold will be guaranteed as to its strength and durability.

W. BOHM, Patentee.

LEANDER RANSOM,

Civil Engineer

AND

SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

0,000 ACRES OF STATE SCHOOL LANDS.

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance in credit of several years.

OFFICE: Second floor of Express Building, N.E. corner of Montgomery and California streets. oct-3m

HAYNES & LAWTON,

IMPORTERS AND DEALERS IN

CROCKERY,

GLASS WARE,

FRENCH CHINA,

Coal Oil Lamps, Table Cutlery,

CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET,

[CORNER OF MERCHANT.]

no16 SAN FRANCISCO.

**MYERS & DAGGETT'S Mining and Stock Exchange,**

No. 23 1/2 B Street, Victoria City, N.T.

Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* \* Abstracts of Titles Furnished, Etc.

FREDERICK MANSELL,

MECHANICAL & ARCHITECTURAL DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorf.

Drawings of Models made for parties applying for patents at Washington or London.

mar-23 2m

A. ROMAN & Co.,

WHOLESALE AND RETAIL

Book Establishment,

417 and 419 Montgomery street,

SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter.

By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigott on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Phelps.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide, or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Mitchell.

Iron Ores and Silver Mines, by Pro. Blake.

Cro's Dictionary of Arts, Manufactures and Mines.

Woods' Mechanics of Machinery and Engineering.

Novels, Hydraulics, Formula Tables.

Especially Chemical Analysis.

Together with many other works in this and similar lines.

Books imported to order on short notice.

A ROMAN & Co.

417 & 419 Montgomery Street.

READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife inadvertently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

THEN THIS!

Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen beliebe man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

Gird's Budding Knife.

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are referred to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, Vol. 2.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentee.)

San Francisco

sepl-3m

SQUARZA'S PUNCH.

WHOLESALE AND RETAIL,

No. 44 Leidsdorf st., near Sacramento.

**The Occidental Hotel**

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities.

The spacious READING AND LUNGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

News Stand,

AND A LARGE

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

John R. Sims,

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

Fire!! Fire!!

**GREAT REDUCTION IN PRICES.**

STANFORD BROTHERS,

121, 123 and 125 California street,

Keep the Largest Stock of all Kinds of

Lamp Stock

And will Sell Cheaper than any other

House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to.

apl6tf

50 lbs. MARINE AND

Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL

Works in this city, for Hulls and Decks of Vessels,

from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and equal to Copper. He can give ample testimonials as to his capacity for the position he seeks.

Apply at this Office.

W. T. & J. GARRATT,

Gity Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE

and Lift Pumps, Church and Steamboat Bells, Taver-

and H and Bells and Gongs, Hoses and all other joints.

Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,

HYDRAULIC PIPES and NOZZLES for MINING PUR-

poses; Iron steam pipe furnished with fittings, &c.;

COUPLING JOINTS of ALL SIZES. Manufacturers of "Gar-

rett's Patent Improved Journal Metal.

SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR

FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorf street,

Opposite the What Cheer House, San Francisco.

LATEST IMPROVEMENT

in Ladies' Buckles.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE

Ladies of this State, as well as to Jewellers and

dealers in Jewelry, that he has made important improve-

ments in BUCKLES, which surpass any and all hereto

made. Their simplicity, commodiousness, and

beauty render them the most useful as well as ornamental

trinkets.

Orders from the country respectfully solicited. For

particulars call at or address, FREDERICK REICHEL,

Manufacturing Jeweler,

620 Merchant street, San Francisco.

REMOVAL.

OFFICE OF THE PACIFIC METAL

urgical Office is removed to 318 California street

Having enlarged our Works at North Beach, we are

now enabled to reduce from 10 to 15 tons of Silver or

Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Sil-

ver smelters' sweepings reduced or purchased.

COPPER ORES.—Highest market rates advanced in

cash, for shipments. S. C. BRADSHAW, Agent,

318 California street, near Sansome.

JOHN WRIGHT, of Sacramento, has established him-

self in San Francisco for the manufacture of every</



## SPECIAL NOTICES.

**Office of the Tennessee Gold and Silver Mining Company.** No. 7, Montgomery Block.—At a meeting of the Board of Trustees held April 22, 1863, an Assessment of One Dollar, (\$1) per share, upon the capital stock of said Company was levied, payable on or before Saturday, the 23d day of May, 1863.  
J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863. [ma2f]

**Office of the San Francisco Gold and Silver Mining Company.** No. 7, Montgomery Block.—At a meeting of the Board of Trustees, held April 20, an Assessment of One Dollar (\$1) per share on the capital stock of this Company was levied, payable on or before Thursday, May 21, 1863.  
J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863. [ma2f]

**Office of the Sam Patch Gold and Silver Mining Company.** No. 7, Montgomery Block.—At a meeting of the Board of Trustees held March 30, 1863, an Assessment of Fifty Cents, (50 cts.) per share on the capital stock of said Company was levied, payable on or before Thursday, April 30, 1863.  
J. H. BLOOD, Secretary.

**ANNUAL MEETING—The Annual Meeting,** for the election of officers, of the SAM PATCH G. & S. M. Co., will be held at the company's Office, No. 7, Montgomery Block, on Monday, May 4, 1863, at 1 o'clock P. M.  
J. H. BLOOD, Secretary.  
San Francisco, April 22, 1863. [td]

**Schmeltzer Gold and Silver Mining Company.**—At a meeting of the Board of Trustees of this Company, held April 11, 1863, an assessment of 25 cents per share was levied, payable in United States coin, to the Secretary, at the office of the company, No. 500 Montgomery street, on or before FRIDAY, April 17, 1863.  
ap20 Im M. G. ELMORE, Secretary.

## To Mine Owners.

**PARTIES desiring a Good silver Mine** and wishing for Machinery to work it for an interest in the Mine Will do well to apply at this office. No organized company need apply.

## New Patent Agency.

**WE HAVE CONNECTED WITH THE** Publication of the "Mining and Scientific Press"

## The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

## Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at  
Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco.  
EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building.  
EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate.  
EWER & SMITH.

## PATENT RIGHTS.

**Patent Rights Bought and Sold,**  
At the office of the "Mining and Scientific Press" Agency.  
EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors.  
EWER & SMITH.

## WANTED,

**GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,**

By FRONTIER A. DEVERCY,

18 ap

487 Pine street, San Francisco.

## P. M. STEAMSHIP COMPANY.

## NOTICE.

Until further notice, the Steamers of Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above date fall on Sunday, the steamer will be dispatched on the following Monday:  
A. B. FORBES, Agent.

## FULTON FOUNDRY &amp; IRON WORKS

## HINCKLEY &amp; CO.,

MANUFACTURERS OF

## Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,  
FIRST STREET,  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.  
PATTERN MAKING in all its various forms. Prices low.  
D. E. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

## TO OWNERS OF WATER-POWER

## Beth's Hydraulic Pressure Wheel.

## THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will Save in Transportation Material and Labor, from 25 to 50 per cent. of the entire cost of the Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address

J. M. BPTH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan 19-1f

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

WETHERED & TIFFANY,  
Office, 410 Montgomery street.

CHARLES R. BOND, (Late City and County Assessor.)

## REAL ESTATE AGENT,

No. 410 Montgomery street, San Francisco.

Real Estate Purchased and sold, and Loans Negotiated.

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\*These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
no 16-1f ZENAS WHEELER.

## PEOPLE'S

Steamship Line!  
CONNECTING  
CALIFORNIA AND NEW YORK,  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

MOSES TAYLOR,  
J. H. BLETHEN.....COMMANDER,

Will be dispatched for

San Juan del Sur,

From Mission street Wharf.

Punctually at 9 o'clock, A. M., on

WEDNESDAY, - - - APRIL 30, 1863.

Connecting at GREYTOWN with the Splendid Steamship  
ILLINOIS.....2500 Tons.

Reduced rates of Passage and quick trips are secured by the re opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, opp. Post Office.

## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The Splendid Steamship,

## CONSTITUTION,

J. T. WATKINS.....COMMANDER

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

On Saturday, ..... May 2, 1863.

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

Corner of Sacramento and Leidesdorff sts.

## Miners' Foundry

—AND—

## MACHINE WORKS,

First St., between Howard & Folsom,  
SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\*Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING.

San Francisco, February 23, 1863.

## DONAHUE'S

## Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

MANUFACTURE STEAM ENGINES, SAW AND GRIST MILL MACHINERY, Boilers, Quartz Stampers, Amalgamators, etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.  
PETER DONAHUE

## PALMER, HANSCOM &amp; CO.,

## GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kind

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

## To Quartz Miners.

Knox's Improved  
AMALGAMATING PAN,  
WITH

PALMER'S PATENT STEAM CHES

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to catching floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOMB & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted to the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

## VULCAN IRON WORKS CO.

P. TORQUET.....MANAGER

R. IVERS. C. R. STEIGER. S. AITKEN

## Steam Engine Builders,

Boiler Makers, Iron Founders and General Engineers,

Nos. 137 & 139 FIRST STREET, - - - - SAN FRANCISCO

STEAMBOAT MACHINERY built and repaired; also Saw Flour and Quartz Mills, Pumping and Mining Machinery, etc., etc., etc.

Proprietors of Morse's Patent Fire Grates, JOFVAL, FOURNEYTON and other Turbine Water Wheels, with latest improvements.

## DEETKEN'S

## Chemical and Metallurgical Works

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES. ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired mill owners. No power nor clean water required for purpose.  
nov 8-3n

## LEWIS COFFEY AND RISDON,

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast (owned and conducted by) Boilers Makers. All orders for New Work, the repair of Old Work, executed as ordered, and warranted to quality.

Old Stand, corner Bush and Market Street Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON

## JAMES PHELAN,

(LATE J. & M. PHELAN.)

## IMPORTER AND JOBBER,

## Wines, Liquors, Etc., Etc

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO

All Goods Guaranteed. Orders Solicited  
TERMS LIBERAL. Jan. 1-1f.

## THEODOR KALLENBERG

## Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Stamps, Dies and the Sinking, Enbossing Stamps. Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market  
n7.3m San Francisco.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, MAY 4, 1863.

NO. 27.

## OUR MECHANICAL INDUSTRY.

We have already alluded to the wonderful progress which San Francisco has made during the past four or five years in mechanics and manufactures, and have proposed to give our readers a brief notice of some of these industrial establishments which are working out such vast accessions to the prosperity and permanence of our city and state. In continuing these notices from week to week, we do not propose to confine ourselves altogether to the large or "first class" establishments; for we are not unmindful of the fact that such have grown up, within a few years, from small beginnings, to their present colossal proportions, and that others that are now circumscribed in their operations, and kept back, for the time being, perhaps by the lack of capital or influential friends, have nevertheless all the ingenuity, skill and energy, requisite to manage the most extensive works of this description. All such are destined to advance with the growth of the city, and many an owner of a small establishment, or one who is now simply a working mechanic, filling long hours in dark and contracted shops, will ere long find themselves owners in large and flourishing establishments, with scores and perhaps hundreds of men in their employment.

The field of operations for mechanics in this city is unbounded. The demand for machinery for mining, milling, manufacturing, etc., is increasing with rapid ratio, and where ores are now employed, hundreds and perhaps thousands, will in a few years be required. Our mountains, north and south, from the very coast to the far interior, through and over the Sierras and stretching across the "Great Basin" right to the Western Slope of the Rocky Mountains, are full of minerals of every known description. So numerous are our mines, that explorations, instead of decreasing the chances for new operations, actually adds ten, twenty and hundred fold to the chances. Never before in the history of California, or indeed of the world, has there been such excitement about new mineral discoveries as at the present time, and never before was the faith of our people so firmly fixed in the absolutely inexhaustible nature of our mines.

Centuries have been insufficient to develop, to their present extent, the mines of the insignificant territories (insignificant in extent) of Cornwall and Wales. What approximation then can we, on the Pacific Slope, hope to make in a single century, toward the development of a territory ten fold richer than Cornwall ever was, and ten times larger in extent than the entire British Isles? When the nursing child of to-day shall walk our streets a tottering old man of our score and ten, he will behold in this city a population larger than is now collected on the entire Pacific Coast, but he will not see one particle of abatement in the mining excitements of the day, or notice any diminution in the number of "new discoveries" reported in the morning papers. These are sober thoughts—the legitimate inferences of present indications, which cannot be ignored, and of which we should not be unmindful.

San Francisco is to become the London of the Western world—the great emporium of Asiatic commerce in its transit

eastward, and the centre and radiating point from which are to proceed all the supplies of machinery and material of every description for the development of our mines and to feed and clothe the people of the interior. The re-opening of the deserted mines of Mexico, and the late wonderful developments on the Eastern Slope, as we have before remarked have already occasioned a largely increased demand for machinery over previous years; but the imagination can scarcely picture the enormous increase in such demand which present indications foreshadow. Nearly all this supply of machinery must be furnished in San Francisco. Scarcely a single decade has elapsed since the first steam engine found its way into the interior of the Pacific Slope. Now they may be numbered by thousands. A few years ago they were obtained chiefly from the East. Now the supply is obtained almost exclusively from the workshops of this city. Where hundreds of these tireless machines are now employed, thousands will soon be required. Indeed the time is rapidly approaching when the only limit to their employment will be the supply of fuel for their consumption.

The wonderful developments of the past few months are giving the mechanics of San Francisco, but a mere inkling of the great magnitude which this interest is soon to assume. This city must continue the workshop of the Pacific Coast. No other point possesses advantages which can, by any possibility, attain to any formidable rivalry.

## COPPER STOCKS AT THE EAST.

Considerable excitement is manifesting itself in Boston, about this time, in relation to copper mining. The present high price of copper, and the remarkable success that has recently attended the working of the mines, both at Lake Superior and in Canada, is attracting the attention of both investors and speculators, and it is believed that the returns of the next two or three years will be very important. Nearly all the Lake Superior Mining Stock is advancing.

The Acton Mine, Canada, is still making most satisfactory returns and its stock is in demand at advanced rates, with but little in the market. This mine within the past few months has proved itself to be very rich, and the vein improves, the deeper it is worked.

The subjoined quotations were recently given in the Eastern papers, as an evidence of the "great advance in Prices" in Copper Stocks. A similar advance in the San Francisco market, would scarcely be noticed, but in Boston, it is noted as something very remarkable:—

	Monday, Feb. 23.	Monday, March 9.		Monday, Feb. 23.	Monday, March 9.
Acton.....	6¼	5¾	Mesnard....	8	11½
Bohemian ..	9¾	9¾	Minnesota ..	84¼	106
Canada ....	1¼	1¼	National....	24	33
Central ....	47	56½	Petheric....	2½	6½
Copper Falls	10½	13½	Pewabic....	54¼	65
Franklin....	52	58½	Pittsburg... 80	92	
Hancock....	12	14½	Quincy.....	62¼	90
Huron.....	12¼	17	Rockland... 20¾	30	
Isle Royal.. 26¼	33		Ruperior... 7¼	13¾	
Toltec..... 3¾	4½		Winthrop... 2½	3½	

## PRODUCT OF THE LAKE SUPERIOR COPPER REGION.

The Lake Superior News and Journal of Jan. 16, 1863, gives the following tables from the most reliable data attainable, showing the rise and progress of the copper business of the Lake Superior region, from 1845 to 1862. The amounts given refer to the rough copper produced as weighed and valued for shipment:—

Shipm'ts in Tons.	Value.	Shipm'ts in Tons.	Value.
1845 ¾	\$ 390	1854 2300	805,000
1846 29	2,610	1855 3196	1,437,000
1847 239	107,550	1856 5726	2,400,100
1848 516	206,400	1857 5759	2,015,650
1849 753	301,200	1858 5896	1,610,000
1850 640	266,000	1859 6041	1,932,000
1851 872	348,800	1860 8614	2,520,000
1852 887	300,450	1861 10337	3,180,000
1853 1452	508,200	1862 9020	.....

The authority before us does not give the estimated value of the yield for 1862, but makes the following allusion to it, in substance as follows:—Although the yield of the mines for 1862 is less in tons of ore than the yield of the previous year, still the amount realized from the sales of copper will be largely in excess of the amount realized in 1861, the price of copper being higher the past year. So that the mines have actually paid better than in any previous year.

The Lake Superior mining region is divided into three Districts, the Portage Lake District; the Ontonogon District; and the Keweenaw District. The first named contains seven producing mines, the second twelve and the third ten—making in all twenty-nine producing mines. The average product of these mines for the past year has been \$163.275—estimating the value of the copper produced at \$700 per ton. "There is no question," says the Philadelphia Mining Journal, "but that the peninsula of Michigan is a California in mineral value. Moreover, it is near by; for, when the Philadelphia and Erie Railroad shall have been opened to Erie City, it will not be long before the copper region of Lake Superior will become better known in this city; because, then, in a car hence to Erie City and a boat thence to the farthest of the great lakes, a visit to Copper Land will combine business with adventure, in a new direction.

With a descending navigation from Lake Superior to Erie City and a single rail interest thence to Philadelphia, there will be cheap and convenient communication with the mineral territory of the peninsula of Michigan."

CAST IRON has been recently experimentally manufactured at the Crevelea Iron Works, in Ireland, by the use of condensed peat. The quality of the iron thus produced is said to be equal to the best Swedish iron.

TELEGRAPH TO REESE RIVER.—Telegraphic communication has been established to Austin, in the Reese River country. The first message was sent from there on the 25th ult.

RICH.—Rock from the Monitor District, Nevada Territory, assayed at Virginia City, has turned out over \$8,000 to the ton.



## THE MINERS' LABORATORY.—NO. I.

We have already announced the preparation of a series of articles under the above head, in which we propose to give a brief digest of so much of the interesting Science of Mineralogy, as shall be of practical utility to the miner and prospector, in his labors and explorations in the field. These papers will be prepared from the latest and best authorities and will embrace the entire range of mineral and metalliferous deposits. We shall not waste the time of the reader to any extent, by any general remarks not strictly belonging to the subject under consideration, but endeavor, to the utmost of our ability, to render these papers a practical manual that shall be especially useful to the prospector and miner, and at the same time, not entirely devoid of interest and instruction to the general reader.

In order to treat the subject intelligently, however, so that it may be correctly understood by those who have hitherto paid but little or no attention to mineralogy, it will be necessary to give a brief introduction, explanatory of certain terms and conditions, which must be used and referred to. Without such explanations these papers will be of but little comparative value either to the general reader, or to the miner who may now, for the first time, desire to gain an insight into the science of practical mineralogy.

## INTRODUCTORY.

The primary object of this science is the development of mineral bodies; a knowledge of their characters, forms and combinations; also the circumstances and conditions in which they are found, and the substances with which they are combined. This is the PRACTICAL object of mineralogy and the point upon which we propose to treat principally in these papers.

A development of the nature of minerals, a knowledge of their elements, their properties and uses, constitutes the ECONOMICAL portion of the science, which though highly interesting and useful to mankind, is not a matter which we propose to discuss to any extent. The miner is directly interested only in the development—the bringing to the surface—of the minerals of the earth; their economy and general introduction into the various channels of business, he leaves to those into whose hands he delivers them in their rough state.

We know but comparatively little of the earth beyond the depth which has been reached by mining operations. This depth when compared to the entire bulk of the earth, may be correctly compared to the minute scratching and pin punctures of a coat of varnish on a 12-inch globe. All beneath is mystery and speculation. Of this we shall treat more at length in future numbers.

A Mineral is an unorganized body, differing from an organized or living body in its structure, in the manner of its formation and of its increase or growth. While organized bodies increase by means of their internal organs, which assimilate and retain in the system what is beneficial and reject what is useless, unorganized bodies increase externally.

A simple mineral substance, as pure gold, silver, etc., may be described as an organized body, presenting an aggregation of lesser particles of the same nature, united by affinity.

Every mineral possesses two distinct kinds of character, by one or both of which it may be distinguished from other substances. These are termed the *external* and the *chemical* characters. The former are commonly apparent to the senses, and the latter are those which are developed during the chemical decomposition, which may be accomplished with or without heat. These characters are denominated as follows:—Aspect, or kind of lustre; color; hardness; specific gravity; streak; form; structure; cleavage; surface; tenacity and transparency.

ASPECT, or Kind of Lustre, is very important, and is divided into metallic and non-metallic aspect; they are often blended in the same mineral. Many minerals also possess two distinct kinds of lustre, one externally and the other internally. The true metallic lustre may always be distinguished from the metallic, pearly-adamantine lustre, by its being always combined with perfect opacity, and by remaining unaltered on the scratched surface.

COLOR is also of considerable importance when combined with metallic aspect. In speaking of color, in connection with minerals, the depth or shade of color should be carefully noted, and the peculiarity of shade expressed as near as possible, by reference to some well known substance.—

The metallic colors are white, divided into silver and tin-white; grey, lead-grey and steel-grey; yellow, brass-yellow, bronze-yellow and gold-yellow; black and copper-red.

HARDNESS is one of the most important of mineral characters. There are generally reckoned ten degrees of hardness: 1, yields easily to the nail. 2, yields with difficulty to the nail. 3, scratches a copper coin, but is also scratched by it. 4, not scratched by copper but is not hard enough to scratch glass. 5, scratches glass, though with difficulty, leaving its powder on it and yields easily to the knife. 6, scratches glass and yields with difficulty to the knife. 7, does not yield to the knife but does to the edge of a file, though with difficulty. 8 and 9, harder than flint. 10 cuts glass.

SPECIFIC GRAVITY.—That is, the weight of a body compared to some other body of the same size or volume. This latter body is assumed as a standard; this standard is pure water at a temperature of 60° Fah. A cubic foot of water weighs 997.136 ounces—usually taken as 1,000. A cubic foot of silver weighs 10,000 ounces; therefore we say silver is ten times heavier than water, and its specific gravity is 10.0.

STREAK is a very effective character; it signifies the color of powder, produced by drawing or *streaking* a mineral across a file. The best way to distinguish the streak is to take a fine file, and drawing it once or twice across the mineral, pass it lightly over your finger; when the color will be thereon, and may be easily noted.

FORM is a character, when regular, of the highest interest, yet of limited utility in the discrimination of minerals.

STRUCTURE AND CLEAVAGE.—The structure of minerals is the mode of aggregation of the particles of which they are composed. *Lamellar structure* is composed of broad, distinct concretions, of about equal length and breadth. *Prismatic, or bladed structure*, consists of long and narrow concretions, forming a transition from the lamellar into the fibrous structure. *Fibrous structure*, consists of fibrous, or very thin and capillary concretions, either straight or curved. *Granular structure* is composed of minute or small concretions, having a nearly equal length, breadth, and thickness. *Compact structure* is devoid of any distinct concretions, and appears to consist of one compact mass.

SURFACE.—The surface of minerals may be either uneven, granulated, rough, smooth, or streaked: streaked surfaces often arise from a close fibrous structure, or otherwise indicate the direction of cleavage planes.

TENACITY.—The following are the different degrees of tenacity:—*Brittle*, such as grate under the knife, or fly off in the form of powder when attempted to be cut; and break into powder, when placed on an anvil and struck by the hammer. *Sectile*, possessed by minerals which yield in a great degree to the knife without noise, the particles remaining on its blade: sectile minerals crush into powder under the hammer. *Malleable or ductile*, the property possessed by minerals which may be cut by the knife, and which flatten into spangles under the hammer.

TRANSPARENCY.—The following are the degrees of transparency, or transmission of light, as possessed by minerals. 0. Opaque 1. Translucent on the edges. 2. Translucent. 3. Semi-transparent. 4. Transparent.

DEGREE OF LUSTRE is distinct from the kind of lustre or aspect of minerals. The degrees of lustre are marked by the following numerals. 0. Dull, devoid of lustre. 1. Glimmering. 2. Glistening, or weakly shining. 3. Shining, as rock crystal. 4. Splendent, or strongly shining, as galena.

FRACTURE is a character of minor importance; it is the appearance of the surfaces produced on breaking a mineral in any direction, except in that of its natural joints or cleavage planes, which ought to be always smooth, and more or less shining.

FORM, FRANGIBILITY, FLEXIBILITY, TOUCH, SOILING AND SOUND, are all terms which are sometimes employed to describe the characteristics of minerals, but as they are of little importance to the general student we pass them by.

ODOUR is confined to a very few minerals; some emit naturally a degree of odour, in others it is produced by breathing on them; in some by friction, and in others it is developed by heat.

ADHESION TO THE TONGUE is a character possessed by such minerals as freely imbibe moisture, and is common to almost all earthy mechanical mixtures and decomposed specimens,

TASTE is a characteristic properly possessed by such minerals as are soluble in water.

MAGNETISM is a characteristic of limited application, but in many cases a very important one. The only metals which attract the magnet, are iron, nickel, and cobalt; and there are very few that affect it in their natural state, but many do so after their exposure to the action of the blow pipe.

ELECTRICITY.—To ascertain whether a mineral possesses this character or not, a small instrument called an electrometer is necessary. Electricity is produced in minerals, either by heat or friction. To try if a mineral possesses the property of electricity, first rub it briskly for a few minutes with a woollen cloth, and then present it to one of the pith balls of the electrometer; or, heat it gently through and do the same; if in either case it attracts the ball, then it possesses electricity.

PHOSPHORESCENCE is a property possessed by some few minerals, of emitting by heat or friction, a faint light. Minerals which become phosphorescent by heat, will almost invariably be found to contain either fluorine, chlorine, phosphoric acid, boracic acid, or the salts of baryta, lime, or zinc. This is however, a very uncertain character, as there are varieties of the same substance in which it can and cannot be developed.

The chemical characters of minerals, are the effects produced on them by the action of acids and of the blow-pipe of which we shall treat in a separate article wherein we propose to give general directions for the use of the blow-pipe.

The effects produced on minerals by the action of acids are very important. These effects are effervescence, solubility, partial solubility producing a gelatinous mass, &c. To develop these effects, the mineral should be reduced to powder, and placed in a small test-tube or other vessel, and the acid, either pure or diluted, must be gently poured over it. The application of heat is sometimes necessary, in which case a spirit-lamp is made use of, and the mineral and acid supported over it in a test-tube, watch-glass, or small capsule of Berlin porcelain, or of platinum, by means of a thin bent wire.

The treatment of minerals by acids will be fully explained in its appropriate place.

MOISTURE IN THE AIR.—The atmosphere always contains water. Most people think its presence a misfortune. They say the atmosphere of California is very healthy because it is so dry. This is an error. The air of California has a great deal more moisture than that of New England, and that is the principal reason for its superior healthfulness in New England the dry air sucks the moisture out of man's air passages and he has the consumption. If he could breathe the moist atmosphere of the Pacific coast, he might recover. In their influence on consumptives I do not mean to say that the only difference between the Atlantic and the Pacific coasts, is found in the amount of atmospheric moisture. But I do say that this is one of the most essential sanitary differences. A man who, in New England, is ever suffering with dry and cracked skin, has in California moist and healthy skin. What is true of the skin is true of the lining of the lungs, with which the same air is in constant contact—the dry air sucks out the moisture and produces disease. All other things being equal the moister the air the healthier it is. Of course this law ceases to hold whenever the moisture becomes sensible, and the clothing thereby saturated. [Journal of a Traveler.]

AN EXTENSIVE MINING CLAIM.—The Placerville Democrat speaks of a Mining Company recently formed near Diamond Springs, which consists of 150 members, who claim 300 feet each, or about 9 miles of ledge for the entire company! The company is styled the "Black Quartz Gold-Silver and Copper Co.," and the ledge is pronounced by good judges one of a most promising character.

THE PIONEER MILL FOR REESE RIVER is now on its way thither, from Pike's Peak. It is an eleven stamp mill, and will be located near Clifton. Machinery, overland, from the East to the Pacific Slope mines is a new idea.

Messrs Buel & Dorsey of Clifton, are now on their way thither, or are already in this city, for the purpose of buying machinery to take to Reese River. We may soon expect some practical results from this newly discovered mining region.



**MINING INCIDENT.**—A few months since a gentleman, who keeps a restaurant in this city, but who at the time of the incident narrated below was keeping a similar establishment in Sacramento, was accosted in the street, by rather a sly looking individual, who frankly informed our restaurant keeper that he was *flat broke*, and hungry. Like a good Samaritan, as he is, the dispenser of edibles invited the stranger to make himself at home at his table until such time as he could get work. He remained with his benefactor several weeks and then left for the mines. Some months afterward the restaurant keeper received from the hands of a stranger, a third party, some certificates of stock in a quartz mine, in payment for his kindness to the stranger No. 1. The stock was then of but little value, and was laid aside for the time. Sometime afterward, having changed his business to this city, and noticing the growing interest in mining here, the restaurant keeper bethought himself of his Sacramento investment, made enquiry as to its value, and to his small astonishment, suddenly found himself in possession of mining property worth \$15,000. He had cast his bread upon the waters and it had returned to him many thousand fold.

#### TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all taliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; or in rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, copper pyrites containing also iron. In either of the latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and heating the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye. Not so with other metals. Silver, copper, zinc, nickel, and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be given which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphuretted ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make an offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and announce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

Our object is to furnish the miners of California with every class of information which shall be valuable to them in

the progress of their calling and in the development of the mineral resources of the State, and we know of no way in which we can devote a portion of our time more to the interests of miners than in the manner here proposed. The only equivalent we ask is that they shall do what they reasonably can to sustain and improve the paper devoted exclusively to their interests.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector; and we have the promise also, at an early day—probably within a week or two—of a series of articles under the head of "THE MINER'S LABORATORY," which will be prepared especially for this paper by one of the most skillful metallurgists on this coast, and which will be found of great value to the mining public.

#### SAN FRANCISCO MINING NOTICES.

##### ASSESSMENTS LEVIED.

Assessments upon Mining Stocks have been levied as follows:—

Garabaldi.—Assessment of \$1 per share, levied March 2nd.

Sutro.—Assessment of \$1 per share, levied Feb. 23, payable March 23.

Silver Quartz Mill Co.—Assessment of 5 per cent. levied Feb. 23, payable March 28.

Napoleon (copper).—Assessments of \$3 per share levied Mar. 3, payable in 30 days.

Golden Age.—Assessment of one dollar per share levied Feb. 24, payable March 26.

Washoe Gold & Silver.—An assessment of 2 per cent. on capital stock was levied Feb. 16, payable Apr. 1.

##### GINNINGS NOTICE

Coso Silver Mining Co.—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home"? If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars; or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

## Minig and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance. C. W. M. SMITH and W. B. EWER, - - - - - Proprietors.

#### Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEROTYPING and ELECTROTYPING, Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Files, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

#### To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

#### MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

#### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

#### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

#### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

#### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

#### Terms.

To mail subscribers:—Four Dollars per annum.

#### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80 Names can be sent in at different times and from different Post-offices Specimen copies will be sent gratis to any part of the country.

#### EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

#### Our Mint, its Rules, Charges and Operations.

##### For parting silver from gold when gold

is below 300-1000ths. fine ..... 3cts per oz.  
" from 300-1000ths. to 750-1000ths fine. 7 cts " " oz.  
" " 750-1000ths to 950-1000ths " 14 cts " "

##### DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce 1/2 per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " " "

##### DEPOSITS FOR FINE BARS.

\$1 16-4-11ths cents. per standard ounce, 1/2 per ct. gross value of silver for making bars; also when gold is contained 1/2 per ct. on gross value of gold for coining. Refining charges as in purchases.

##### BARs SOLD FROM REFINERY.

\$1 21cts. per standard oz. 1/2 per ct. gross value to be added for making bars.

##### DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz. 1/2 per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

##### DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz. 1/2 per ct. gross value of deposit for making bars.



## PROGRESS OF THE MINING INTEREST.

We still continue our notes of Mining Progress. There appears to be no diminution of interest in mining operations, but rather an increase, and a more general desire than ever to invest. New discoveries and new developments in old workings are constantly being made. In the excitement consequent upon such a state of things it is gratifying to notice a growing disposition, among outside operators, to observe more caution in their investments. One of the first things to be required by that class of buyers is that the stock which they purchase should be controlled by a regularly incorporated company, whose officers and chief managers should be well known as men of integrity. Care also should be taken to learn the actual condition of the mine, the extent to which it has been developed, the character of its title, whether disputed or perfect, etc. There is no need to be rash or in haste to invest. Opportunities for good investment will increase monthly, and yearly for many a generation to come. Quartz mining is very different from placer mining; for while the latter may soon be skimmed over, and the richest workings exhausted, the former will be likely to improve for decades if not for centuries. The cream of the quartz mining business in California and the adjacent territories is yet far in the future.

## VIRGINIA DISTRICT.

The COLE is running a new tunnel to strike the lode at a depth of 575 feet. They are already in 150 feet. This company, we believe, has the deepest shaft in the Territory. Their main shaft reached a depth of 365 feet some two or three months ago, since which time we presume the work has still been continued upon it. Some very excellent silver bearing rock was taken from this shaft at a depth of 340 feet. The next deepest shaft in the Territory is on the Hale & Norcross ground, and is only some 40 or 50 feet less than the Cole.

The DANE is taking out ore from a 20 foot shaft.

The DUNN has recently struck very good rock, which, at last accounts was improving as the work progressed.

The SCORPION have driven their tunnel to a distance of 625 feet, and are expecting to reach their lode inside of 100 more. The depth at which they will strike it will afford a good test of its value.

The CHARLES CANEY have a good vein in their engine shaft at a depth of 56 feet. They have a 25-horse power engine now on the ground and in process of erection.

## GOLD HILL.

Very interesting and important developments have been for some time in progress in and about Gold Hill, and a large share of attention is being turned in that direction; every day, almost, brings something new from that locality.

The BELCHER, (which was noticed in our Washoe correspondence of last week,) in consequence of new developments, has advanced within the two weeks past from \$50 to \$450 per foot. The mine, at last accounts, wore a most promising aspect for even larger advances.

The KELOGG, BALL & Co's claim of 85 feet and "Bob. Aples" interest of 75 feet, the two next adjoining the Belcher will lose none of their value by reason of this "strike." The latter, indeed, is already improving in appearance, at the mine.

The OVERMAN Co., the third from the Belcher, comprising 1200 feet, has united with the Apple Co. in sinking a joint shaft on their dividing line, which, it is intended shall be equal in workmanship to anything of the kind in the territory. It will be 12 by 5 feet in the clear, lined with 3-in plank, and constructed in three compartments—two for cars, and the other for the pump; this shaft has reached a depth of 100 feet, and is intended to connect with the Overman tunnel, which is in 750 feet, and will not be completed much before the shaft is ready for it; the tunnel will drain the ledge 234 feet below the surface. Mr. Apple was offered \$600 a foot last week, and the Overman was held at \$80.

The LA MOTTE made a rich strike in their lower tunnel, on the 23d ult, in consequence of which their stock suddenly advanced from \$15 to \$70 per foot. This Company's tunnel was only recently commenced, and runs in on the length of the ledge, from Bower's ravine, at Gold Hill; it is said

the lead is thirty feet wide and the pay streak recently struck about twelve inches wide. There are 1200 feet in the claim. The Company was incorporated on the 14th of March last.

The GOLDEN GATE.—The shaft of the Golden Gate Company, on the divide between Virginia and Gold Hill, has reached a depth of 140 feet, and numerous small spurs, or feeders to the ledge have been cut through, which much resemble the Gould & Curry. What was supposed to be the main lead was passed through some time ago; it was about twenty feet wide, but contained no mineral of any consequence. The shaft will be continued to a depth of 300 feet, and a drift run to the ledge, when the share holders will be able to arrive at a fair approximation to the value of their mine.

## DEVIL'S GATE DISTRICT.

The ALAMO are taking out rock, averaging about \$50, from a 60-foot shaft. Their rock is crushed by contract.

SOUTH HADLEY.—This Company has struck the lode at a depth of 60 feet.

## FLOWERY DISTRICT.

The ROGERS, one of the oldest locations in this district, have run their tunnel 560 feet, and are now putting down an additional shaft. This company has a steam mill in operation, with 10 stamps, running upon custom work.

## ESMERALDA.

The work of development is still progressing finely in this region. Tunnels are being run and projected in every direction, where surface indications point to rich minerals below. Tunnel Enterprises, indeed, seem to be a feature in Esmeralda and evince the confidence which holders have in the "feet" that they have located.

We have heretofore, through our Esmeralda correspondence, given a pretty full account of most of these undertakings. A new enterprise of this description has recently been undertaken which is quite fully described in the *Star* of the 25th ult, from which we condense:

The STANFORD TUNNEL just being commenced is one of the best mining enterprises ever started in this District. It is located on the western side of Silver Hill and about a quarter of a mile above the American. The Company are composed of staunch business men in Sacramento and San Francisco as well as old experienced quartz miners here.

The President of the Company is Governor Stanford, Secretary, Newton Booth, of Sacramento, where the transfer office is kept.

The Tunnel when completed will be three thousand feet in length and will embrace all the blind ledges for two hundred feet on each side of it. A handsome cut has been opened from eight to twelve feet wide and fifty in length; the present contract is being completed under the Superintendency of Mr. A. E. Libby.

The company have a good location for a large mill, the erection of which will soon be commenced. The Tunnel will strike the Utah and all those rich ledges which cluster and run together on that side of the hill, reaching them at a depth of eight hundred feet, together with all the rich blind ledges which they are bound to strike. They are already taking out rich boulders which will pay for crushing, and as fast as they take them out they break them to pieces and pile them up. Success to the Stanford Tunnel.

NEW ROCK DRILLING MACHINE.—Think of using diamonds to cut rocks with! But an instrument for boring into hard rock, made out of a tube furnished with a circular cutter of rough diamond, is now being employed in France. It is caused to revolve, and, as it enters the stone, the cutter scoops out a cylinder, which is afterward easily taken out of the tube. Holes in hard granite, for blasting purposes, two inches in diameter and four feet deep, are thereby bored in one hour. This would require two day's work in the ordinary way. The diamonds, when examined through a magnifying glass, do not look at all injured.

MOUNT SHASTA OVERTOPPED.—Mount Shasta has hitherto been considered the highest peak in the United States. A recent measurement of Long's Peak, in Colorado, however, proves that mountain to be 14,470 feet above the level of the sea, or thirty feet higher than Mount Shasta.

A MATCH factory is in successful operation at Petaluma.

MINERALOGICAL.—We would call the especial attention of such of our readers as are not acquainted with Mineralogy, but who desire to obtain so much knowledge of that interesting science as may be requisite, to enable them to pursue, with a fair degree of confidence, the ordinary service of prospecting for minerals, to the series of articles which we have commenced in another column, under the head of the "Miners' Laboratory." These articles will be found very valuable to all miners, and will afford sufficient instruction in the general principles of mineralogy, including the use of the blow-pipe, and qualitative assaying, to enable any person to arrive at an approximately correct conclusion with regard to the general characteristics of such minerals. The number which we give this week may seem devoid of interest, or special value, but its careful study is indispensable to any proficiency in this department of knowledge.

We have been induced to prepare and publish this series of articles in consequence of the absolute lack of any books of instruction on this coast from which the information we prepare may be obtained. Miners will do well to either file the papers containing them, or cut out the articles and file them away as scraps. The series will be regularly numbered.

## GENERAL MINING STOCK REPORT.

## REPORT OF SALES

At the San Francisco Mining Stock Board,

For the week ending May 2, 1863.

Names of Companies.	Total No. Shrs	Shares per ft	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir - - - - -	16,800	12	\$300	2450	—	—	2400	2500	2450
Gould & Curry - -	4,800	4	500	3825	—	3500	3725	2600	3800
Central - - - - -	1,800	12	300	—	—	—	—	—	—
California - - - -	3,600	12	300	—	—	—	—	—	—
Chollar - - - - -	5,600	3	300	475	540	488	515	507½	—
Potosi - - - - -	2,800	2	500	725	675	700	750	—	—
Hale & Norcross - -	80	2	500	925	—	—	—	—	—
Sierra Nevada - - -	3,000	1	500	57½	60	65	—	60	62½
Daney - - - - -	8,000	4	500	400	390	400	380	385	380
Burning Moscow - -	4,800	2	100	150	165	175	170	170	170
North Potosi - - -	2,000	1	300	37½	35	40	40	37	40
Rogers, F. D. - - -	3,000	1	250	—	—	—	—	12	—
Meredith - - - - -	7,200	2	125	—	40	—	—	42½	80
Charles Caney - - -	1,800	1	30	125	105	110	—	—	92½
Sacramento - - - -	1,800	1	500	—	—	—	60	—	—
Lucerne - - - - -	1,800	1	500	—	—	—	—	—	—
Lady Bryan - - - -	5,000	1	100	—	—	—	—	—	—
Savage - - - - -	800	1	—	—	2060	1950	2050	2000	2000
Iowa - - - - -	—	1	—	—	—	—	—	—	—
El Dorado - - - - -	—	1	—	115	145	—	100	85	75
Norton - - - - -	1,600	1	—	26	27	35	32	25	27½
La Crosse - - - - -	—	—	—	—	—	—	—	—	—
Moss - - - - -	—	—	—	—	—	—	—	—	—
Porter - - - - -	—	—	—	—	—	—	—	—	—
Burnside - - - - -	—	—	—	32½	30	27	29	31	33
Adriatic - - - - -	—	—	—	8	10½	9	8	—	—
Cedar Hill Tunnel -	—	—	—	5½	5½	5½	5½	5½	5½
Mount Davidson - -	10,000	1	200	—	5	—	—	—	—
<b>ESMERALDA STOCKS.</b>									
Wide West - - - - -	1,600	1	600	360	375	370	375	375	375
Autelopo - - - - -	1,200	1	500	—	345	340	342½	342½	340
Esmeralda - - - - -	1,600	1	1000	41	42	44	47	47	46
Real Del Monte - -	4,400	1	400	110	190	175	175	180	175
Utah - - - - -	1,200	1	100	8	—	7	—	9	11
Silver Hill - - - - -	3,000	1	—	83½	70	70	100	100	100
Nevada - - - - -	—	—	—	—	20	15	20	25	27½
<b>COSO STOCKS.</b>									
Josephine - - - - -	—	—	—	22	22	23½	24	23	20
Coso - - - - -	—	—	—	—	—	—	—	—	—
Willow Springs - - -	—	—	—	—	18	17	14	13	12½
<b>MEXICAN MINES.</b>									
Mina Prieta - - - -	—	—	—	—	—	—	—	—	—
Dios Padre - - - -	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon - - - - -	—	—	—	75	100	—	—	—	40
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill - - - -	—	—	—	7½	7½	7½	8	7½	8½
Utica - - - - -	—	—	—	—	—	—	—	—	—

## REMARKS

Quite a large amount of business has been done in the mining share market during the past week, and generally at improved rates. The advances have mostly been based upon actual developments and improvements at the mines. Several instances of important fluctuations have been noticed, produced mostly through speculative operations.

Ophir and Gould & Curry have both been inactive during the week. The former has remained quite firm at about last week's quotations, while the latter has advanced about \$100, remaining firm at \$3600. We neglected in our last to notice the payment of another monthly dividend of \$100 to the foot by the Gould & Curry.

The chief transactions of the week in Virginia Stocks have been confined to the Chollar, Daney, Burning Moscow and North Potosi.

The Chollar has been steadily advancing for the last two weeks. During that time it has gone up from the depressed figure of \$560 to \$505.

The Daney still continues active, but at lower rates than the week previous. This depression has been caused in part by the fact that the last re-



from the mill have not been quite so favorable as those of previous weeks.

Burning Moscow has been considerably dealt in at improved rates. We quote as high as \$177½ cash and \$210 b 30.

North Potosi has been more active than usual, though at slightly depreciated rates.

Potosi is firm at considerable advance, with more buyers than sellers.

Mount Hope, adjoining the Potosi is beginning to attract considerable attention. They have a fine, well defined ledge, at a depth of 160 feet. This line will soon be thoroughly opened. We quote at \$140 @ \$48.

Charles Caney has declined slightly and is less active. The Company has good vein at a depth of 60 feet, and steam power about going into operation.

El Dorado has been more active than usual during the week at largely advanced rates, caused by their success in striking a good vein in their lower tunnel, on Monday last.

#### HUMBOLDT AND REESE RIVER.

Humboldt and Reese River Stocks are beginning to attract attention in this market. Sheba is held firm at about \$500, with but little in the market. De Soto is equally firm at \$10. The principal stocks from the Humboldt District known in this market are the Sheba, De Soto, Schuykill, Ben Franklin, Golden Age Series, Moonlight, Magna Charta Series, Peerless, Rose Whitman and Fort Pitt. There are doubtless others, perhaps more valuable, which have not yet generally become much known here.

From Reese River we have most favorable reports, and important results are confidently looked for, as seen as the mills under contract and in contemplation shall be put in motion. The Governor Seymour, Union, Harter and Honest Miner have each a quantity of ore now on its way to this city to be tested here by machinery, in working quantities. Assays from these claims are high; but the only satisfactory results are those obtained on regular working machinery. We shall await these results with much interest, and give them to our readers at the earliest moment.

#### ESMERALDA.

The Wide West has not yet recovered from the depression caused by the late unexpected assessment, although it is said the Company's mill is working with most satisfactory results. Three hundred pounds of unsorted malgams are reported as the result of one week's run of ten stamps. Antelope is improving, also the Real del Monte.

Silver Hill continues active at materially improved rates. We quote today as high as \$75 cash, \$14 advance on the highest rates of last week. Josephine and Willow Springs in the Coso district still remain active at previous quotations.

#### THE COPPER INTEREST

is still improving in favor and enhancing in value. New "Strikes" and important developments are daily reported. Indeed, on this side of the mountains, copper is a decided favorite over both gold and silver. Its value in "feet," however is not yet fully appreciated among speculators on Montgomery street. The mines exist, nevertheless, and the work of development is being pushed with a vigor never excelled in any previous mining operations on this coast.

#### TRANSACTIONS IN SHARES, FOR THE WEEK.

#### NEVADA STOCKS.

Lady Bryan—10 at \$11; 50 at \$12.  
Burnside—10 at 31; 20 at 30; 10 at 31; 5 at 33; 15 at 33½.  
Norton—10 at 26½; 25 at 30; 10 at 33; 10 at 32; 30 at 35; 10 at 35½; 10 at 34½.  
Adriatic—40 at 10½; 100 at 12 b 30 d; 40 at 10½; 87½ at 11 b 30d.  
Reese River—20 at 5; 12 at 4½; 100 at 4½; 20 at 4½; 25 at 4; 100 at 3.

Cedar Hill Tunnel—20 at 4¾; 20 at 5¾.  
Red, White, and Blue—53 at 17; 156 at 20 b 30 d; 20 at 18; 20 at 20 b 30 d; 20 at 19.  
Governor Nye—40 at 12; 20 at 12; 35 at 12; 15 at 12½.  
Union, (Gold Hill)—5 at 55.  
Sierra Nevada—5 at 65; 5 at 70 b 30 d; 5 at 65; 10 at 62½.

De Soto—5 at 117½; 5 at 115; 10 at 117; 9 at 115.  
Bajazette—10 at 25; 30 at 25.  
Best & Belcher—5 at 400.  
Mount Hope—5 at 32½. } Milton—10 at 85 b 30.  
Overman—25 at 200. } Empire—10 at 40.  
Federal Hall—50 at 1½; 100 at 1½; 100 at 1½.  
Mount Hope—25 at 40; 50 at 36 b 30 d; 10 at 45; 10 at 47½; 10 at 48; 5 at 41½; 20 at 45; 15 at 46; 10 at 50 b 30.  
Utica—20 at 12. } Cole—20 at 14.  
Savage—3 at 2000.

Chollar—20 at 565 b 30; 20 at 407 50; 20 at 560 b 30; 20 at 520; 20 at 516; 20 at 420; 60 at 560 b 30; 20 at 525; 40 at 525; 21 at 500; 13 at 520; 68 at 475.

Hale & Norcross—10 at 950 b 30; 8 at 925; 10 at 900 R. W.

Daney—4 at 390; 20 at 430 b 25; 44 at 400; 8 at 405; 40 at 402; 20 at 430 b 25; 60 at 425 b 30; 20 at 405; 56 at 430 b 30; 8 at 387 50; 22 at 420 b 30; 60 at 425 b 30; 20 at 400; 20 at 415 b 15; 20 at 425 b 30; 172 at 400 b 30; 40 at 400; 20 at 397½.

Burning Moscow—20 at 170; 10 at 177 50; 4 at 175; 10 at 210 b 30; 10 at 170; 10 at 190 b 30; 10 at 178; 30 at 175; 10 at 175.

Chas. Caney—3 at 140; 25 at 145 b 30; 30 at 145 b 30.  
North Potosi—10 at 40; 5 at 42 50; 10 at 35; 10 at 36; 5 at 39; 34 at 40; 35 at 40; 40 at 43 b 30; 10 at 40; 50 at 42½ b 30 d.

El Dorado—5 at 140 b 30; 40 at 120; 10 at 145; 5 at 140.  
Meredith—25 at 40. } Boston—50 at 4½; 50 at 5½.  
S. W. Ex. Sunbeam—50 at 4.

#### ESMERALDA STOCKS.

South Utah—5 at 35; 5 at 39; 10 at 45.  
Wide West—2 at 397½; 10 at 400 b 30; 10 at 395 b 30; 10 at 400 b 30; 5 at 375; 25 at 400 b 30 at 380.

Pond—5 at 90 b 30; 20 at 75; 5 at 65; 5 at 67; 10 at 65; 18 at 60;

Falls of Clyde—25 at 10; 30 at 10; 25 at 10½.

Garibaldi—20 at 32½; 25 at 29.

Bamboo—3 at 46; 2 at 42; 10 at 51½ b 30.

Bodie, No. 1—100 at 11.

Antelope—10 at 330; 3 at 340; 10 at 345.

Esmeralda 13 at 42; 50 at 47; 5 at 47½; 30 at 48; 75 at 48 b 30; 10 at 47 b 30.

1st N. Ex. Esmeralda 25 at 5; 50 at 6; 25 at 6½.

Silver Hill—30 at 61; 6 at 65 b 30; 80 at 75, 140 at 70; 10 at 77; 10 at 75; 35 at 70; 7 at 70; 5 at 70; 60 at 67½.

Utah—10 at 110 b 30; 5 at 100.

Lake View 50 at 2; 100 at 2¾; b 30; 100 at 2¼; 50 at 2.

Sunbeam—20 at 5½; 40 at 5; 40 at 16; 30 at 15.

Mary Ann—20 at 45. } Wisconsin—5 at 22.

Lucerne—20 at 8. } Mount Bullion—50 at 3; 20 at 2½.

#### COSO STOCKS.

Josephine—5 at \$27; 25 at \$22; 25 at \$23; 10 at \$24½; 20 at 23¾; 20 at 23½; 10 at 24; 25 at 23½; 10 at 24; 10 at 26; 5 at 27; 13 at 24.

Willow Springs—10 at 18½; 40 at 19; 10 at 17; 20 at 15½; 40 at 14; 50 at 15 b 30; 10 at 13; 5 at 12½.

#### CALIFORNIA STOCKS.

Melones—5 at \$125; 8 at 127½; 50 at 135 b 30.

#### COPPER STOCKS.

Napoleon—4 at \$80; 5 at 100; 10 at 75 b 30;

#### VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Friday, April 30, 1863.

Virginia Mining District.		Bid.	Ask'd	Union		Bid.	Ask'd
Asblaud	100	12		U. S. Tunnel	5	6	
Allan	100			U. S. Tunnel	5	6	
Altichon	150			Old Virginia	250		
Alturas	7			Washington	10		
Belvidere	55	60		York	5	7	
Birdsall	20	25		Zouave	17	20	
Bajazette and Golden Era	20	25		Gold Hill District.			
Barride	35	40		Baltic	18	20	
Burning Moscow	135			Bullion (consolidated)	85		
Beach-Paxton	200	250		Belcher	600		
Bloomdale	5	6		Branch Mint	7		
Ceresus (Buchanan)	250			Caledonia	25	30	
Cedar Hill Tunnel	5	5½		Dana			
Cole	20			Eureka	20	22	
Commercial	10			Golden Gate		5	
Consolidated Cedar Hill	4			Golden Eagle		12	
Durgen	3	5		Hawkeye	12		
Empire	6			Koh-i-noor	300		
El Dorado	150	140		Leon	200	225	
Fairview	100			Laboring	15		
Grass Valley	15	20		Mary Ann	55	60	
Hazel Green	5			North American	15	20	
Harrison, Virginia Incorpor	50	55		North Blair (nominal)			
Harrison San. Fran. Incor.	10	12		Oreana	55	60	
Irving	10			Princess	60	65	
Insurance	17			Sinaloa	20		
Kenosha	12			Sweezy			
La Crosse	10	12		Sierra	40		
Masilou	15			Union			
McBee	25			Yellow Jacket	510		
Monsieur	70	15		Yolo	20	25	
Madison	15	20		Devil's Gate District.			
Mohegan	6	10		Governor Nye	10	12	
Oreana	3½	5		Hawley	20		
Oscota	15			Monterey	7		
Pride of Washoe	30	35		Pride of the West	125		
Peyton	40			Winnemucca	10		
Recorder	17	20		Wide West	10		
Santa Rita	45	50		Flowerly District.			
Santa Fe	12			Atwill			
Summit, (nominal)				Adriatic	7	10	
St. George	4	5		Lady Bryan	12	15	
Sierra Nevada	70			Harrison	5	6	
Sacramento	62½	75		Uncle Sam	5		
Shamrock	15	16					
Texas	10	12					

#### WASHOE STOCK REMARKS.

For the week ending April 30, 1863.

There has been no lack of excitement in the Stock Market, during the past week. A general improvement has been noticed in most Stocks, and important advances in a few. Gold Hill still presents the chief field of attraction. The developments in that quarter are of a most exciting character, and the tendency of all Gold Hill Stocks of established value is upward. This point is beginning to divide the honors with Virginia City. We have full reports of the market to Monday Evening.

The Enterprise of Monday, April 27th, remarks as follows of the Leon and Koh-i-noor—

The Leon and Koh-i-noor, the latter claiming what is known as the Belcher ledge, have been the rage to-day among the Gold Hill claims. The

Leon adjoins the Belcher ledge on the north, and its advance in the market has been unprecedentedly rapid, even in this country of fluctuations. Six weeks ago it could have been bought for \$1 per foot; four days since it was selling at \$30 @ 32; to-day it is marketable at \$175 @ 200, with an upward bent. The Koh-i-noor is rapidly gaining in favor, and may be quoted at \$200 @ 250.

Overman has met with a material advance during the week. Starting at \$45 @ 60 on Monday, it reached \$75 on Wednesday, advanced to \$100 on Thursday and was quoted at \$150 to 165 on Monday April 27th.

Belcher is still in high favour. This Stock has gone up within about two weeks from \$50 to \$550 and \$800. The developments in this mine are of the most gratifying character. Were the ledge from which the ore is now taken through the works of this company without dispute, it would very soon command a first-class price in the market. There was some further excitement touching the Belcher, on Thursday last and it may be quoted at \$600 per foot.

Bullion was largely dealt in the first of the week to fill extensive orders. On Thursday it had advanced somewhat, and was quoted at \$45, 30 ds. On Monday last it was still in lively demand at \$55 @ 60. Our Washoe Pony Report, dated Thursday last, quotes a still further advance to \$85.

The Princess has been quite a sharer in the animation of the past few days. It was only in quiet request at the commencement of the week, some uneasiness being felt with regard to its suit with the Yellow Jacket. On Thursday the report of a probable compromise with their suit, added to the favourable appearance of the mine, improved the feeling with regard to it, and on Monday we find it quoted at \$45 @ 60. On Wednesday last it had advanced \$60 @ 65.

The Union has also been a sharer in the excitement. It was sold on the morning of Monday at \$25 to 27. Exciting reports coming in from the mine it was soon in lively request at \$45 @ 60, at which figures it closed the week.

Yellow Jacket has experienced considerable fluctuation. It commenced the week at \$375, and gradually advanced to \$525 @ \$530 on Thursday and closed at \$475 @ 495. Our Pony Report of last Thursday leaves it at \$510. The transactions have been quiet.

The El Dorado which had been quiet during the first of the week began to come in for a considerable share of attention with the indications of a near approach to the lead in their lower tunnel. On Saturday it was quite lively at \$75 @ 80. On Monday last they struck their ledge, and holders were still at a large advance over previous quotations. Our Pony Report of Thursday quotes it at \$130 @ 140—an evidence of a good ledge at that depth.

The Birdsall, adjoining the El Dorado on the south, was materially influenced by the advance of the latter, and is tending rapidly upward. It was quoted on Monday at \$65 @ 70, with little in market. This is an advance of \$25 over previous quotations.

Belvidere has advanced within the past week from \$20 to 55, probably through sympathy with the Chollar and Potosi.

Sacramento, which was languishing during the week previous, rallied on Monday last, and was quoted at an advance of \$2½ @ 4.

Badjazzet & Golden Era has fluctuated greatly during the week. It was considerably dealt in on Thursday, opening at \$30, it advanced to \$45 @ 50 and declined at night to \$30 @ 35. It was still declining on Monday and now remains at previous quotations.

Gold Hill, Nos. 1, 2 & 3, were in high demand on Monday. On Tuesday they were quoted as follows—No. 1, \$525 @ 550; No. 2, \$350 @ 375; No. 3, \$175 @ 200 and No. 4, at \$160 to 175.

We refer to our stock list and Washoe letter for further and later information by Pony.

#### VIRGINIA CITY, THURSDAY, APRIL 30, 1863.

This disposition manifested on the part of capitalists to invest in Washoe Stocks during the past week has been unparalleled in the history of this country. Even the wild fear of the spring of sixty presented less activity in Nevada stocks than the present week. However, operations are made with a greater degree of caution and more general surety of success. The developments continually being brought to light are of such character as would seem to warrant almost any reasonable investment. The ore taken from the Koh-i-noor or Belcher is quite equal to that of the Ophir or Gould & Curry and the ledge appears not less formidable.

#### ESMERALDA STOCK LIST.

[Corrected Weekly for the Mining and Scientific Press.]

Amador		Bid.	Asked	Heath		Bid	Ask'd
Atlantic	2	5		Herman Consul	10	12	
Arcade	6	10		Horn (Check, Excelsior Dis	5		
Autelope	6			Keweenaw	30		
Alturas	15			Live Yankee	15		
Atua	6	8		Lord Byron	7	12	
Brazil	5	10		La Plata	7½	12	
Bodie Bluff Consolidation	18			Main Esmeralda	65		
Bodie Peak, Bodie District	15			Monroe			
Bright Star	6			Mckinstry Tunnel Co.	12		
Bamboo	9			Monte Christo, Tunnel co.	24		
Bullion (Van Horn Dist.)	10			Mutual	12		
Bodie Bluff, No. 1	12			Mount Braley	3	5	
Bodie Bluff, No. 2	5			New Esmeralda Consol.	6½	12	
Bunker Hill	12½	14		Newton	60		
Bonaparte, Tunnel comp.	20			Nevada, (Tunnel)	25		
Chester	6			Ozark	20	30	
Chimney	6			Old Winnemucca	10		
Chihuahua	20			Paul Tunnel Co.	2		
Cape	5			Pacific	20		
Del Monte	165	175		Pond			
Durgen	9			Pride of Autelope	10	15	
Delta	10			Peru (two ft. to the share)	15		
East Essex Ex. Ural	12			Real Del Monte	100		
Excelsior, Excelsior Dist.	5			Rake	17½	30	
Empire	28			Strawberry	20		
Franklin, Tunnel company	5	9		Silver Hill	112		
Fallstaff	6			Silver Hill, Bodie District	8		
Fallstaff, Consolidation	4	5		St. Louis	5		
Fresno	9			Tiger	4		
Falls of Clyde	9	10		Tucker			
General Hooker (Con.)	22			Union	25		
General Jackson	13½	14		Union Tunnel	20	30	
Garibaldi	35	60		Utah	100	120	
Golden Harvest	5			Ural proper	500		
Golden Cross	25			Ural (extension)	10		
Governor Seymour	25			William Tell	2½		
Golden Age	32	45		Wide West	395		
Glover	15			Washington, Tunnel comp.	6		
Howard Tunnel Co.	10			X-Elva and Constantinople consolidated	1½		



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value.	shrs per foot.	ass'ts to date	Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value.	shrs per foot.	ass'ts to date	
RUTH WINDSOR Tun' Co	Esmeralda District	T. L. Bibbins	305 Montgomery st	\$100,000	\$100	1	\$	MORAYE, G. S. & Copper	La Paz, Colorado	G. J. Turner	606 Montgomery st	\$250,000	\$250	1	\$	
ANTLOPE SPR. G. S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	400,000	500	1	640	BLUE RIDGE MINING CO.	Slate Range	G. J. Turner	606 Montgomery st	240,000	100	3 ft		
JACKSONSON G. S.	Gold Flat Nev Co	T. L. Bibbins	305 Montgomery st	500,000	600	1	200	MADISON, SLATE RANGE	Slate Range	G. J. Turner	606 Montgomery st	264,500	100	2 ft		
COOK G. S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	60,000	100	1	480	SAN FRAD. SLATE RANGE	Slate Range	G. J. Turner	606 Montgomery st	270,000	100	2 ft		
CEADAR G. S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	600	CATCA MINING CO.	Slate Range	G. J. Turner	606 Montgomery st	195,000	100	2 ft		
SOTOGAME G. S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	1,350	TRICHOIN	Virginia District	N. Shiverick	Mer. st. Mtngy Bldg	600,000	500	1	16,000	
RED WHITE & BLUE G. S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	360	HAWELEY G. S.	Devil's Gate Dist	C. Stevens	6 Parrots Building	1,500,000	500	1	2,200	
LILLY OF THE WEST G. S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	360	PEYTORA G. S.	Virginia District	C. Stevens	6 Parrots Building	1,000,000	100	1		
ESTICK G. S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	1,000	CLARK CREEK G. S.	Eagle & Washo dis	C. Stevens	6 Parrots Building	1,100,000	500	1		
BULLION G. S.	Van Horn District	T. L. Bibbins	305 Montgomery st	960,000	100	1		MASIDORA G. S.	Sonora, Mexico	F. H. Waterman	618 Merchant str	240,000	100	1		
LAUREL HILL Mining Co.	Tuolumne County	C. S. Higgins	410 Montgomery st	300,000	100	1	200	UNIONIDA G. S.	Esmeralda District	E. Daniels	Cashier Custom H	600,000	500	1		
UNION G. S.	Russ District	C. S. Higgins	410 Montgomery st	1,620,000	100	1	6,275	RHODES DINGENES Q M Co	Sacramento County	G. T. Touchard	414 Montgomery st	570,000	400	1	2,280	
COMBINATION G. S.	Telescope District	C. S. Higgins	410 Montgomery st	990,000	50	2	11,700	SAN WAGUAT	Aurora, Mono Co.	E. Worth	547 Washington st	700,000	500	1	700	
BULLION G. S.	Russ District	C. S. Higgins	410 Montgomery st	465,000	50	2	23,000	ANORRA, MONO CO.	Aurora, Mono Co.	E. Worth	547 Washington st	120,000	200	1		
WHITE & MURPHY, G. S.	Virginia District	J. P. Nourse	Lucas & Turners bg	126,000	500	2	68,000	FEDERAL UNION	Aurora, Mono Co.	J. F. Bailey	605 Sacramento st	300,000	500	1	600	
MINNA PRIETA G. S.	Sonora, Mexico	J. P. Nourse	Lucas & Turners bg	2,200,000	100	1	45,000	JOSEPHINE G. S.	Coso District	W. W. Lawton	400 Montgomery st	1,200,000	250	1		
BURNING MOSCOW G. S.	Virginia District	J. P. Nourse	Lucas & Turners bg	450,000	100	2		NEVADA G. S.	Devil's Gate	Samuel Marx	610 Washington st	120,000	200	1	1,000	
BUCKEYE G. S.	Silver City	F. S. Carter	415 Sansome st.	280,000	100	1	3,200	NEVADA COPPER Mfg. Co.	Grass Val. Nev. Co	John Armstrong	610 merchant str.	240,000	100	2	1,200	
AMERICAN G. S.	Virginia District	R. L. Taylor	612 Washington st	160,000	100	1	1,050	CINCO SENORES G. S.	Sinaloa, Mexico	John Armstrong	610 merchant str.	500,000	200	2		
FRANCIS G. S.	Slate Range District	A. H. Clark	522 Montgomery st	1,500,000	500	1	1,050	JACK HAYES	Esmeralda District	J. H. Blood	7 Montgomery Bldg	60,000	50	1		
SLATE RANGE G. S.	Slate Range District	A. H. Clark	522 Montgomery st	1,500,000	500	1	1,050	EARLY DAWN G. S.	Devil's Gate Dist	J. H. Blood	7 Montgomery Bldg	60,000	50	1		
ROCHSTER G. S.	Slate Range District	A. H. Clark	522 Montgomery st	315,000	150	1	315	SAN PACHE G. S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	100,000	100	1		
PAIDADELPHIA G. S.	Slate Range District	A. H. Clark	522 Montgomery st	815,000	150	1		FULTON G. S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	100,000	100	1		
NEW YORK G. S.	Slate Range District	A. H. Clark	522 Montgomery st	315,000	150	1		KOHLER BRO'S G. S.	San Antonio, L. C.	Kohler Bros	Sansome street	24,000	1000	1		
CAYARAGUS G. S.	Slate Range District	A. H. Clark	522 Montgomery st	315,000	150	1	7,350	LUCERNE MINING CO.	Gold Hill District	S. C. Paxon	472 Montgomery Bldg	900,000	500	1		
ALBANY G. S.	Slate Range District	A. H. Clark	522 Montgomery st	315,000	150	1		MOUNT DAVIDSON G. S.	Virginia District	F. A. Fabens	712 Montgomery st	450,000	100	1	2,750	
LADY BRYAN G. S.	Flowersy District	J. F. Bailey	605 Sacramento st	500,000	100	1		MERCEDITH G. S.	Virginia District	E. B. Holmes	428 Montgomery st	600,000	500	1		
DESEET M. Co.	Flowersy District	David Wilder	522 Montgomery st	440,000	150	1	5,000	PIONEER COSO G. S.	Coso District	E. B. Holmes	712 Montgomery st	450,000	100	1		
BURNING CO.	Humboldt N. Ter.	J. H. Gager	Merchist, mnt blk	120,000	100	1	600	HOPE G. S.	Humboldt Nev. Ter.	R. T. C. Page	428 Montgomery st	600,000	500	1		
EVERETT G. S.	Humboldt N. Ter.	J. H. Gager	Merchist, mnt blk	440,000	100	1	60	MADISON G. S.	Virginia District	P. B. Cornwall	608 merchant str.	800,000	500	1		
NORTH STAR G. S.	Silver Mtn. mono.	J. H. Gager	Merchist, mnt blk	200,000	100	1		SOUTH UTAH G. S.	Esmeralda District	P. B. Cornwall	608 merchant str.	400,000	1000	1		
CRYSPOLIS G. S.	Humboldt dis. n.t.	J. H. Gager	Merchist, mnt blk	300,000	300	1		MELONES & STANISLAUS	Calaveras County	L. Franconi	Lucas & Turner bg	150,000	50	18 in		
ESTRELLA DEL MONTNE S.	Humboldt dis. n.t.	J. H. Gager	Merchist, mnt blk	180,000	100	1	1,380	ALAMEDA COAL MIN'G CO.	Alameda County	L. Franconi	"	500,000	100	1	6,000	
MANHATTAN G. S.	Gopher, Calav. Co.	J. H. Gager	Merchist, mnt blk	262,000	210	1		GOULD & CURRY G. S.	Virginia District	J. C. L. Wadsworth	"	2,400,000	500	1		
SIGEL G. S.	Humboldt N. Ter.	J. H. Gager	Merchist, mnt blk	600,000	500	1	*67	KATE G. S.	Humboldt Nev. Ter.	L. Franconi	"	180,000	100	1	450	
ROCKWELL G. S.	Humboldt N. Ter.	J. H. Gager	Merchist, mnt blk	245,000	100	1		HOPE G. S.	Humboldt Nev. Ter.	L. Franconi	"	180,000	100	1	450	
ANNIE LAURA G. S.	Humboldt District	J. H. Gager	Merchist, mnt blk	600,000	500	1		OPHI G. S.	Virginia District	Thos J. Lamb	Rm. I, Express Bg	5,000,000	300	12 in		
STARLIGHT G. S.	Humboldt District	J. H. Gager	Merchist, mnt blk	570,000	100	1		SANTIAGO G. S.	Silver City District	E. A. Breed	"	2,800,000	1000	1		
ATINA G. S.	Esmeralda District	William Winchester	Aurora, Mono Co.	120,000	100	1		NOBLE COPPER MIN. CO.	Calaveras county	E. A. Breed	"	1,100,000	500	1		
ALHAMBRA G. S.	Devil's Gate Dist	O. Strauch	815 Sansome street	100,000	200	1		NORTH POTOSI G. S.	Virginia District	E. V. Joyce	Cor. Bat. & Wash.	550,000	250	1	2,600	
WEST WEST Mining Co.	Esmeralda District	S. Patten	522 Montgomery st	1,300,000	500	1	14,300	NORMAN G. S.	Virginia District	J. H. Brewer	40 Montgomery Plk	160,000	100	1	110,000	
RICAL DEL MONTE, CONS.	Esmeralda District	S. Patten	522 Montgomery st	1,700,000	400	1	6,400	SIERRA NEVADA G. S.	Virginia District	J. H. Brewer	40 Montgomery Plk	1,500,000	500	1		
ESMERALDA MINING CO.	Esmeralda District	S. Patten	522 Montgomery st	1,600,000	500	1	13,200	EARLY DAWN G. S.	Devil's Gate Dist.	J. H. Brewer	40 Montgomery Plk	400,000	500	1		
ESMERALDA N. EXTENS'D	Esmeralda District	S. Patten	522 Montgomery st	1,600,000	500	1	6,750	PORTER G. S.	Lumb Leige	R. C. Page	428 Montgomery st	390,000	500	1		
SILVER HILL, CONSOLID'D	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	SCORPIO G. S.	Virginia District	W. H. Martin	617 Clay street	400,000	100	1	12,000	
ANTLOPE G. S.	Esmeralda District	S. Patten	522 Montgomery st	600,000	500	1	92,750	RUBY G. S.	Star District	W. H. Martin	617 Clay street	120,000	100	2	120	
LOUISA G. S.	Silver City District	J. F. Pope	115 California st.	200,000	100	1	4,500	SILVER CITY G. S.	Silver City	O. Risdon, Jr.	Cor. Bat. & Bush	1,000,000	100	1		
ROGERS G. S.	Flowersy District	J. F. Pope	115 California st.	900,000	300	1		SUCCESSOR G. S.	Gold Hill District	R. H. Waller	1 Montgomery blk	240,000	100	1	12,600	
ALAMO G. S.	Devil's Gate Dist.	J. F. Pope	115 California st.	300,000	100	1		SIERRA G. S.	Genoa District	S. P. Vandayke	127 Clay street	500,000	300	1	28,600	
BELLA VISTA G. S. & S.	Lower California	S. S. Sprague	Cor Cal & Sansome	72,000	500	1	8,400	SILVER CITY QTY. MILL CO.	Silver City	E. Bauer	414 Washington st	1,200,000	100	1	1,650	
ESMERALDA MINING CO.	Esmeralda District	C. Lovelock	424 Jackson street	250,000	100	1		SIERRA G. S.	Silver City	E. Bauer	414 Washington st	1,200,000	100	1	1,650	
BADNER G. S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	800,000	400	1	16,600	MILWAUKEE G. S.	Slate Range	W. F. Clarke	224 Montgomery st	270,000	100	1	1,550	
IOWA G. S.	Virginia District	R. N. Van Brunt	706 Montgomery st	1,200,000	1000	1	16,600	MORROW, EAST. G. S.	Slate Range	W. H. Clarke	224 Montgomery st	180,000	100	1		
LATROBE Tun & mfg Co	Virginia District	R. N. Van Brunt	706 Montgomery st	1,250,000	100	1	16,200	ALBANY, EAST. G. S.	Slate Range	W. H. Clarke	224 Montgomery st	180,000	100	1		
NORTON G. S.	Virginia District	R. N. Van Brunt	706 Montgomery st	80,000	50	1	17,900	MOUNTAIN VIEW G. S.	Slate Range	W. H. Clarke	224 Montgomery st	240,000	100	1		
REESE RIVER G. S.	Reese River District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1	105,000	WASHINGTON G. S.	Slate Range	W. H. Clarke	224 Montgomery st	210,000	100	1		
SAN MARCIAL G. S.	Sonora, Mexico	R. N. Van Brunt	706 Montgomery st	264,000	90	1	144,000	SACRAMENTO, EAST. G. S.	Slate Range	W. H. Clarke	224 Montgomery st	270,000	100	1		
SATYAGE MINING CO.	Virginia District	G. B. McAuey	712 Montgomery st	1,500,000	1000	1		SANTA ROSA G. S.	Virginia District	Nelson Hudson	Front street	270,000	100	1		
SAFORDIA G. S.	Virginia District	G. B. McAuey	712 Montgomery st	440,000	300	13 ft		SAFORDIA G. S.	Virginia District	S. W. Moore	408 California st	900,000	500	1		
CONTRAL G. S.	Virginia District	G. B. McAuey	712 Montgomery st	440,000	300	13 ft		WILLOW SPRINGS G. S.	Coso District	J. H. Sayre	224 Montgomery st	270,000	100	1		
OSCAR HILL m. & T. Co.	Virginia District	L. L. Farrington	509 Sacramento st	1,000,000	500	1	54,000	SOL LEWIS G. S.	Esmeralda District	H. C. Chambers	22 merchant st	700,000	500	1		
CHOLLAR G. S.	Virginia District	W. F. Dean	53 Mont'ry Block	1,680,000	300	4	2,800	TESORO G. S.	Lower California	H. C. Kibbee	cor Sanome & cal	540,000	100	1		
CHENANGO G. S.	Silver City	W. F. Dean	53 Mont'ry Block	350,000	250	1		UNITED STATES G. S.	Virginia District	S. R. Rooney	7 & 8 Gov't House	200,000	100	1	8,000	
CROWN POINT G. S.	Gold Hill District	J. H. Jones	321 Front street	1,200,000	100	1	15,000	VILLANAR MINING CO.	Lower California	J. D. Creigh	cor mer & mont st	240,000	100	1		
CHARLES CALEY G. S.	Devil's Gate Dist.	Gomer Evans	338 Mont'ry st	270,000	150	1		WASHOE G. S.	Gold Hill District	D. A. Jennings	Jackson, cor. Front	1,000,000	500	1		
CHORRAL G. S.	Esmeralda District	John Woodthorpe	326 Clay street	60,000	100	1		WASHOE G. S.	Gold Hill District	D. A. Jennings	Jackson, cor. Front	1,000,000	500	1		
EMMETT G. S.	Esmeralda District	John Woodthorpe	326 Clay street	60,000	100	1		WASHOE G. S.	Gold Hill District	D. A. Jennings	Jackson, cor. Front	1,000,000	500	1		
DOYLE G. S.	Esmeralda District	John Woodthorpe	326 Clay st.	60,000	100	1		WASHOE G. S.	Gold Hill District	D. A. Jennings	Jackson, cor. Front	1,000,000	500	1		
ISAACS G. S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1		IDA G. S. & S. Mining Co.	Russ District	David Wilder	522 Montgomery st	510,000	300	2	600	
KOHLER G. S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1		TABLE MOUNTAIN COP. CO.	Calaveras County	M. G. Elmore	528 Montgomery st	787,000	250	1		
LIVINGSTON G. S.	Esmeralda District	James Neary	326 Clay st.	300,000	500	1		COLUSA G. & S. M. Co.	P. R. dis. Humb'l	M. G. Elmore	528 Montgomery st	900,000	100	1		
VIBBARD G. S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1		RIP VAN WINKLE G. S.	Esmeralda District	M. G. Elmore	528 Montgomery st	300,000	250	3		
LAS CRUCITAS mining co.	Mexico	C. J. Breuhm	cor. Jack & Front	225,000	125	1	400	SCHMELTZER G. S.	American dis. Hum	M. G. Elmore	528 Montgomery st	300,000	100	2	420	
LIV DAY G. S.	Esmeralda District	Joseph R. Beard	4 Armyory Hall	1,000,000	200	1	400	SAN FRANCISCO G. S. & M. Co.	San Francisco	M. G. Elmore	528 Montgomery st	1,400,000	500	1		
MAMMOTH, No. 1	Esmeralda District	Joseph R. Beard	4 Armyory Hall	210,000	300	1	350	SACRAMENTO M. & T. Co.	Esmeralda District	James Neary	587 Sansome st	300,000	100	1		
MOUNT HOPE G. S.	Virgin & Gold Hill	Thos Brownjohn	621 Clay street	1,000,000	500	1	1,950	FOUNDATION M. & T. Co.	Esmeralda District	A. Davidson	Oakland	508 clay street	450,000	750	10 ft	
SOLIDAD G. S.	Soledad Dis. Los An	George H. Russell	636 Sacramento st	780,000	100	1	2,100	GAUDALOUPE G. S.	Chihuahua, Mexico	Wm. Blackwood	518 merchant st	50,000	500	1		
COPPER HILL G. S.	Soledad Dis. Los An	E. Barry	636 Sacramento st	840,000	100	1		GOLD HILL O. M. & M. Co.	Gold Hill District	Charles Pioda	627 Front street	50,000	500	1		
MADISON G. S.	Virginia District	P. B. Cornwall	608 Merchant st	800,000	500	1		Governor Nye G. S.	Devil's Gate Dist.	George M. Blake	416 clay street	960,000	400	1		
SOUTH UTAH G. S.	Esmeralda District	P. B. Cornwall	608 Merchant st	400,000	100	1		GOLD HILL UNION MILLS.	Gold Hill District	J. F. Sterling	327 commercial st	120,000	100	1	450	
NEVADA MINING CO.	Esmeralda District	P. B. Cornwall</														



# Volcanic Smelting Furnace.

PERSONS DESIRING INFORMATION AS TO THE USE of a economical properties of this Furnace, and its ability to make use of the same, when satisfied of its superiority over all other means of reducing ores and treating metals from the sulphurets, can obtain all the explanation and advice in regard to the same, and terms of sale of rights to use the same, on application to J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietress through the Post Office of San Francisco. Drawings may be seen at the office of Col. J. D. Stevenson, 614 Merchant street, or at the office of T. Ogg Shaw, Brannan's Building, Montgomery street.

The time required for reducing ores by this Furnace from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form.

The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of a capacity for smelting one ton of ore or more, on giving an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention for a longer period than two months.

mech 16 MRS. E. J. HALL, M.D., Proprietress.

# New Style of Lady's Buckle.

W. BOHM, INVENTOR & PATENTEE

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any her in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years, exceeds all other buckles in

## Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of

BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH H. BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold will be guaranteed as to its Strength and Durability.

W. BOHM, Patentee.

# LEANDER RANSOM,

## Civil Engineer

AND

# SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

# STATE LOCATING AGENT.

And as such having the sale of

100,000 ACRES OF STATE SCHOOL LANDS.

At the low price of \$1.25 per Acre.

Terms.—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oc7-3m

# HAYNES & LAWTON,

IMPORTERS AND DEALERS IN

## CROCKERY,

GLASS WARE,

## FRENCH CHINA,

Coal Oil Lamps, Table Cutlery,

## CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET,

[CORNER OF MERCHANT.]

no16

SAN FRANCISCO.

# MYERS & DAGGETT'S Mining and Stock Exchange,

No. 23 1/2 B Street, Virginia City, N. T.

## Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* \* Abstracts of Titles Furnished, Etc.

# FREDERICK MANSELL, MECHANICAL & ARCHITECTURAL DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorf.

Drawings of Models made for parties applying for patents at Washington or London.

# A. ROMAN & Co.,

WHOLESALE AND RETAIL

# Book Establishment, 417 and 419 Montgomery street, SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter.

By James Phillips and John Darlington. Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigot on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying, by Phillips. Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines. Wernsch's Mechanics of Machinery and Engineering

Seville's Hydraulic Formula Tables. Fresenius' Chemical Analysis.

Together with many other works in this and similar lines

Books imported to order on short notice.

A. ROMAN & Co.

417 & 419 Montgomery Street.

## READ THIS!

COAL OIL EXPLOSION.—ON SATURDAY EVENING, while Mr. Brewster was engaged in the Summer Street House in pouring coal oil from one can to another, his wife imprudently approached with a lighted candle and the oil exploded. Mrs. Brewster's arms were badly burned, as were also the husband's hands. However, he succeeded in mastering the flames, and preventing worse consequences.—[Evening Bulletin, Aug. 4.]

## THEN THIS!

### Comet Illuminating Oil!

Manufactured expressly for Stanford Bro.

THIS POPULAR

## Brand of Kerosene

Is warranted free from Camphene, Petroleum, or any other explosive material, and is the

## BEST FAMILY OIL IN THE MARKET.

STANFORD BROTHERS,

Nos. 121, 123 and 125 California street.

# Zur Beachtung für Erfinder.

Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Skizzen von Erfindungen mit kurzen, deutlich geschriebenen Beschreibungen belieben man zu adressiren an.

J. SILVERSMITH, Exchange Building, Room 23.

## Gird's Budding Knife.

THE ATTENTION OF FARMERS, HORTICULTURISTS and Cutlers, or manufacturers of Horticultural Implements, are respectfully called to the above invention. For description and engraving see MINING AND SCIENTIFIC PRESS No. 24, vol. v.

State, Territory and workshop rights for sale at reasonable prices.

Address, Publishers of Mining & Scientific Press, (Agent for Patentee,) sepl-3m San Francisco

# SQUARZA'S PUNCH.

WHOLESALE AND RETAIL,

No. 44 Leidsdorf st., near Sacramento.

# The Occidental Hotel

IS NOW

## Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities.

The spacious BREAKING AND EXCHANGING ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

## News Stand,

AND A LARGE

## CABINET FOR MINERALS;

ALSO

## A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND & Co.,

Proprietors.

San Francisco, Jan. 1st, 1863.

# John R. Sims,



Oregon street, between Washington and Davis and Front and Jackson streets, SAN FRANCISCO.

Manufacturers of Fire Proof Doors and Shutters, Bank Vaults, Grating, Cemetery Railings. All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

Mr. Sims Appreciates the Past liberal patronage of his friends, and trusts that he may continue to merit it in the future.

## For the Information of Strangers

he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attest. A large assortment of second hand shutters for sale at low rates. ap13

## To Mill Owners.

WANTED, by a person fully competent to the position, a situation as MINING SUPERINTENDENT in a Gold or Copper Mine. The Applicant was engaged for about eight years as Superintendent of Copper Mining Works in Cornwall, and has acted in the same capacity in Gold Mines in this State for the past seven years. He has had much experience in Cornwall, as an assayer, a Machinist, a Draughtsman, a Surveyor and an Assayer of Copper Ore. He can give ample testimonials as to his capacity for the position he seeks.

Apply at this Office.

# W. T. & J. GARRATT,

## City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garrett's Patent Improved Journal Metal."

# SQUARZA'S PUNCH.

## FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR

FOR 1862.

## ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorf street,

Opposite the What Cheer House, San Francisco.

## LATEST IMPROVEMENT

## in Ladies' Buckles.

MR. REICHEL RESPECTFULLY ANNOUNCES TO THE Ladies of this State, as well as to Jewelers and dealers in Jewelry, that he has made important improvements in BUCKLES, which surpass any and all heretofore made. Their simplicity, commodiousness, and beauty render them the most useful as well as ornamental trinkets.

Orders from the country respectfully solicited. For particulars call at or address, FREDERICK REICHEL, Manufacturing Jeweler, 620 Merchant street, San Francisco.

# GREAT REDUCTION IN PRICES.

## STANFORD BROTHERS,

121, 123 and 125 California street,

Keep the Largest Stock of all Kinds of

## Lamp Stock

And will Sell Cheaper than any other House in this State

LAMPS, CHIMNEYS,

WICKS, CAMPHENE,

BURNING FLUID,

ALCOHOL, COAL OIL

TURPENTINE, KEROSENE OIL,

COMET ILLUMINATING OIL,

SPERM OIL, LARD OIL,

MACHINERY OIL,

RAPE SEED OIL,

CHINA NUT OIL,

POLAR OIL,

LINSEED OIL, Raw and Boiled,

SHARK'S OIL,

NEAT'S FOOT OIL,

TANNERS OIL, ETC.

Our customers in particular, and the country trade generally, are requested to ascertain our prices before purchasing from traveling agents, as we will sell at less rates than they can afford to. ap16tf

## 50 lbs. MARINE AND

## Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Trademen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FORQUE, Superintendent.

WORKS, North Beach; Office, 318 California st., San Francisco.

## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

## REMOVAL.

OFFICE OF THE PACIFIC METALurgical Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day. Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased. COPPER ORES.—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent, 318 California street, near Sansome.



## SPECIAL NOTICES.

**Office of the Nevada Copper Mining Co.**  
March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty Cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees,  
J. ARMSTRONG, Secretary.

**Office of the Tennessee Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees held April 22, 1863, an Assessment of One Dollar and Fifty Cts per share upon the capital stock of said Company was levied, payable on or before Saturday, the 23d day of May, 1863.  
J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863. [ma21]

**Office of the San Francisco Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees, held April 20, an Assessment of One Dollar (\$1) per share on the capital stock of this Company was levied, payable on or before Thursday, May 21, 1863.  
J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863. [ma21]

**Office of the San Patch Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees held March 30, 1863, an Assessment of Fifty Cents, (50 cts.) per share on the capital stock of said Company was levied, payable on or before Thursday, April 30, 1863.  
J. H. BLOOD, Secretary.

**ANNUAL MEETING.**—The Annual Meeting, for the election of officers, of the SAN PATCH G. & S. M. Co., will be held at the company's Office, No. 7, Montgomery Block, on Monday, May 4, 1863, at 1 o'clock P. M.  
J. H. BLOOD, Secretary.  
San Francisco, April 22, 1863. [td]

**Schmeltzer Gold and Silver Mining Company.**—At a meeting of the Board of Trustees of this Company, held April 11, 1863, an assessment of 25 cents per share was levied, payable in United States coin, to the Secretary, at the office of the company, No. 500 Montgomery street, on or before FRIDAY, April 17, 1863.  
ap20-1m M. G. ELMORE, Secretary.

## To Mine Owners.

**PARTIES having a Good silver Mine** and wishing for Machinery to work it for an interest in the Mine Will do well to apply at this office. No organized company need apply.

## WHEELER'S

### Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
no16-1f ZENAS WHEELER.

## Agency For Patents.

THE UNDERSIGNED having been long established in the Patent Agency Business, and having favorable arrangements for attending to the interests of inventors at the Patent Office in Washington, offer their services for the securing of Caveats and Patents also, will attend to the sales of Patent Rights, and to all matters connected with patented inventions.

**WETHERED & TIFFANY,**  
Office, 410 Montgomery street.

**CHARLES R. BOND,** (Late City and County Assessor.)  
**REAL ESTATE AGENT,**  
No. 410 Montgomery street, San Francisco.

Real Estate Purchased and sold, and Loans Negotiated.

## P. M. STEAMSHIP COMPANY.

## NOTICE.

Until further notice, the Steamers of Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above date fall on Sunday, the steamer will be dispatched on the following Monday.  
A. B. FORBES, Agent.

## FULTON FOUNDRY &amp; IRON WORKS

**HINCKLEY & CO.,**

MANUFACTURERS OF

## Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,

**FIRST STREET,**

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* \* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done. PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. Wm. E. WORTH. Wm. A. FIELD.

## TO OWNERS OF WATER-POWER

### Beth's Hydraulic Pressure Wheel.

#### THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will Save in Transportation Material and Labor, from 25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the Miners' Foundry, from 10 to 11 A. M., or address J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan18-1f

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods, CARPETS, DUCK, ETC.,**

**Cor. Front and Sacramento streets, SAN FRANCISCO.**

## NATHANIEL GRAY,

**General Furnishing Undertaker,**

641 Sacramento st., Cor. of Webb, SAN FRANCISCO.

## Percy Douglas,

IMPORTER OF

## CROCKERY,

## FRENCH CHINA,

**Glass Ware, Etc., Etc.**

No. 421, MONTGOMERY STREET.

SAN FRANCISCO.

### WANTED,

**GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,**

By **FRONTIER A. DEVERCY,**

13 ap 487 Pine street, San Francisco.

## New Patent Agency.

WE HAVE CONNECTED WITH THE Publication of the "MINING AND SCIENTIFIC PRESS"

### The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

#### Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office), San Francisco. **EWER & SMITH.**

#### FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building. **EWER & SMITH, Solicitors.**

#### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate. **EWER & SMITH.**

#### PATENT RIGHTS.

Patent Rights Bought and Sold, At the office of the "Mining and Scientific Press" Agency. **EWER & SMITH.**

#### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. **EWER & SMITH.**

## P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

#### FOR PANAMA.

The Splendid Steamship,

### CONSTITUTION,

J. T. WATKINS ..... COMMANDER

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

On Saturday, ..... May 2, 1863.

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.  
For Freight or passage, apply to

**A. B. FORBES, Agent.**

je4 Corner of Sacramento and Leidesdorff sts.

## Miners' Foundry

—AND—

## MACHINE WORKS,

**First St., between Howard & Folsom, SAN FRANCISCO.**

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* \* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

**HOWLAND, ANGEL & KING.**

San Francisco, February 23, 1863.

## PALMER, HANSCOM &amp; CO.,

## GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

**GENUINE WHITE IRON SHOES AND DIES.**

**PALMER, HANSCOMB & CO.**

## To Quartz Miners.

**Knox's Improved**

**AMALGAMATING PAN,**

WITH

**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching floating gold and silver, known to be otherwise lost. Made exclusively by

**PALMER, HANSCOM & CO.,**

**GOLDEN STATE IRON WORKS,**

Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms, for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. **W. A. PALMER.**

## VULCAN IRON WORKS CO.

**P. TORQUET.....MANAGER.**

**R. IVERS. C. R. STEIGER. S. AITKEN.**

### Steam Engine Builders,

**Boiler Makers, Iron Founders and General Engineers,**

Nos. 137 & 139 FIRST STREET, ---- SAN FRANCISCO.

STEAMBOAT MACHINERY built and repaired; also Saws, Flour and Quartz Mills, Pumping and Mining Machinery, etc., etc., etc.

Proprietors of **Morse's Patent Fire Grates,** JOURNAL, FOURKEYTON and other Turbine Water Wheels with latest improvements.

## DEETKEN'S

### Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek, SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 20 to 50 per cent; higher than the BEST AMALGAMATING PROCESS.

\* Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for his purpose. nov8-3m

## LEWIS COFFEY AND RISDON,

### STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

**LEWIS COFFEY J. N. RISDON.**

## JAMES PHELAN,

(Late J. & M. PHELAN.)

IMPORTER AND JOBBER,

### Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets, SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited. TERMS LIBERAL. Jan. 1-1f.

## FREDOR KALLENBERG

### Maker of Models

FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps.**

Repairing of Machinery promptly attended to. No. 4 Sansome street, corner Market, n7-3m. San Francisco.



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, MAY 11, 1863.

NO. 28.

## SPECIAL NOTICE.

We wish it distinctly understood that all the interest which Julius Silversmith ever had in the MINING AND SCIENTIFIC PRESS, ceased in November of 1862. EWER & SMITH are now the publishers and proprietors.

## NOTICE.

With the present number, we forward bills to those of our subscribers whose names were handed over to us by the former proprietor of the Press. We have made out the accounts as we find them on the books, and will correct any errors which may be pointed out. We trust our interior subscribers will recognize the importance of an immediate attention to the matter. Subscriptions can be enclosed, in old coin, within a letter, and forwarded through the Post-office. All such letters should be "registered," when they are sent at our risk. When it is impractical to send the exact amount of the bills, we will give credit for whatever amount it may be convenient to forward, and will enclose receipt in next paper; or the exact amount may be sent in gold or silver coin through Wells, Fargo & Co's Express.

## CHEMISTRY.

No branch of science has made more rapid strides within the past twenty-five years than that of Chemistry. The discoveries in this science are yearly adding immensely to the industrial employments and productions of the world. The manufacture in the United States of articles strictly classed as chemical, exclusive of paints, varnish, white lead, perumes, cement, etc., amounted, in 1850 to about \$5,000,000. Since that time these values have been vastly increased; how much will not be known until the final publication of the census report for 1861.

This branch of science is yet but in its infancy, and is susceptible of almost unlimited extension, and application to the creation of useful articles, largely from the refuse of every other manufacture, but chiefly from the diversified products, vegetable, animal and mineral of our own and other lands. Many of the chemical branches, apart from the money value of their manufactures, are of the highest economical importance to our national industry.

Perhaps the most important of the results of Chemistry during the last decade has been those in connection with the manufacture of Petroleum. The late discoveries of immense deposits of this mineral oil, and the skill with which the chemist has manipulated it, has resulted in building up an entirely new, large and lucrative branch of business. Chemistry has as yet revealed but a tithe of the wealth of its vast resources.

CONNECTICUT TOBACCO.—About one hundred and fifty tons of Connecticut-river tobacco have recently been shipped from and above Hartford, through the agency of a Springfield man, to a house in New York, for the French Government.

## THE MEXICAN TRADE.

The short sightedness of our trans-mountain neighbors in their late legislative attack upon San Francisco capital seeking investment in Washoe, has resulted in turning much of the mining capital of this city into quite a new channel.

Although this unfriendly action proved inoperative, for the time, in consequence of its overleaping itself, it has nevertheless had the effect to so disturb the confidence of capitalists here, in the legislative action of that region as to induce a large diversion of capital into another direction, and into a region which, according to present appearances bids fair to prove an equal to Wa-hoe.

In striking contrast with the action of our neighboring Territorial Legislature, may be placed the liberal inducements which the Mexican Government is holding out to attract thither foreign capital for the development of its mines. The large amount of capital now seeking investment in Mexico will soon Americanise the northern border provinces, and bind them to us by the strongest of all ties, those of consanguinity and interest. The most casual observer of events cannot fail to notice the rapidity with which the new born trade with Mexico is growing into an importance of the first magnitude among our California commercial interests. The steamship line which, but a few months since, was put on as an experiment now finds it absolutely impossible to transact all the business which is crowding upon them. Every available space on board their ships is crowded with freight and passengers. Sailing vessels have also been put upon the route, but the demand for freight and passage is still in advance of present facilities. So great is this demand that unseaworthy vessels have been employed, and others so overcrowded with deck loads, that the insurance companies have refused their protection, until a portion of the same has been again replaced upon wharfs to await subsequent departures. The regular departure of these steamers is beginning to be looked upon with about as much interest, and attended with nearly as large crowds as the departures of the Atlantic steamers.

Many of our most prominent citizens and capitalists have embarked in the enterprise of re-opening these old mines. Among the departures by the last steamer, we notice the name of Judge Sherwood, one of California's Pioneers. He took with him men and machinery to work the Soyota Mine, in Sonora, of which he is Superintendent. The field of operations in this region is not less extensive than that upon the Eastern Slope, and is probably fully equal in value. Many of the Mines in Northern Mexico are known to be of extraordinary richness. They were opened and worked at a time when the knowledge of mining was exceedingly imperfect. The steam engine was a thing entirely unknown to the operators in the mines, and even the ordinary windlass was a labor saving invention, which if known to them, was entirely ignored, for we read that all the ore was packed out of the mine, up perpendicular steps by manual labor. When water was reached the mine was very soon abandoned. Notwithstanding all these drawbacks immense fortunes are known to have been extracted from these mines. Such being the facts we may reasonably expect most extraordinary

results from the introduction of modern improvements, and Yankee skill and energy. With these advantages we hazard but little in saying that this new field of mining enterprise will soon equal, if indeed it does not surpass any other mining field in the world, in productiveness. The Sierra Madre is one vast series of silver mines from South of Durango and Sinaloa to the dividing line between Mexico and the United States; while the Coast region and the Peninsula of Lower California is equally rich in both copper and silver. But a very few only of these mines have yet been opened; thousands are yet to be brought to light by the tireless exploring energies of the universal Yankee whose tide of emigration has now been turned in that direction.

All this region is destined to become commercially tributary to San Francisco. The channels of trade on this coast are as fixed as are the channels of our rivers. Legislation cannot alter them. Neither state lines nor international boundaries can turn them. The efforts of legislation in Nevada have but checked the flow of capital thither for a time, injuring that territory to the amount of millions, but really benefiting San Francisco, by causing an overflow of capital in a new direction and opening up a field, which might otherwise have remained fallow for years. San Francisco wishes no ill to Nevada, but rejoices as much in any degree of prosperity which may attend her, as she does in that which may attend any portion of the Pacific Coast. If Nevada wishes to develop her own mines with her own capital, it is well. San Francisco will seek other fields. We have them, both rich and in abundance. However and wherever communities may grow up on the Pacific Slope, physical and geographical conformations must so regulate the channels of their trade as to make this city the common centre and radiating point. There is not ten miles square of land from Central Mexico on the south to the northern line of the British Possessions, and east to the dividing ridge between the Atlantic and Pacific oceans, in whose prosperity San Francisco is not pecuniarily interested. Without a rival from the Equator to the North Pole, she sits in her glory the complacent and benignant queen of the entire Pacific Slope.

THE HESPERIAN.—The May number of this excellent monthly came duly to hand. It is filled with the usual variety of valuable and interesting matter, embellishments, etc., not forgetting the welcome paper pattern—welcome to the ladies, at any rate. The magazine is now under the Editorial charge of Mr. and Mrs. Strong, who are assisted by an able corps of contributors.

THE PACIFIC REVIEW for May, has also been received. This number is embellished with a most truthful and life-like portrait of Rev. Dr. Wadsworth. The Pacific Review is a periodical of which California may well be proud.

POST-OFFICE AT CLIFTON.—A Post-office has been established at Clifton, Reese River. People writing to their friends at Austin or Clifton, should address their letters to the latter place instead of Jacobsville.

PATENT GRANTED.—Mr. E. Elliott, of Petaluma, has received letters patent on a pump recently invented by him. This pump is said to be a most important invention.



## THE MINERS' LABORATORY.—NO. II.

We have already described a *mineral* as an unorganized body, formed and enlarged by an increase of particles, externally, said particles being attached by mere *juxtaposition* instead of *assimilation* as is the case with vegetable and animal organism. All solid substances therefore which possess neither vegetable nor animal life are *mineral*. All rocks, are minerals and the chief part of soils are mineral.

When a mineral has a metal of any kind associated with it, it is commonly called an *ore*—as an ore of silver, an ore of lead, copper, etc. Ores are usually found in veins, sometimes however in beds. A mineral bed usually lies horizontally, or at a very slight inclination. Lead, zinc and iron are often found in beds; gold, silver, copper, mercury, etc., very seldom.

## MINERAL VEINS.

We propose in this chapter to treat principally of *mineral veins*. A mineral vein may be described as a fissure or crevice in the earth, more or less vertical, and filled with some kind of vein-stone, usually quartz, more or less mixed or impregnated with various metals, and when so mixed called ores. Most metalliferous veins contain several varieties of metals. The veins of California and Nevada territory probably contain a larger variety of metals than those of any other portion of the globe. Veins vary in width from a fraction of an inch to one or two hundred feet. They usually range from 10 inches to two or three feet in width. Of the *origin* of veins and the manner of their being filled, there are various theories. The opinions of practical and scientific writers on this subject are quite various. Some attribute these fissures to a process of cracking or opening of the earth in long fissures by some interior power of upheaval; others attribute their formation to a contraction of the earth's crust in the process of cooling or crystallization; others again suppose them to result from the action of electrical currents. Their manner of filling up is also a matter of great diversity of opinion. Intrusion, sublimation, deposition, infiltration from water, electrical agencies, etc., are among the most commonly entertained theories. The probability is that all the agencies named have contributed at times and in part in a greater or less degree toward preparing these valuable deposits, so indispensable to the progress of civilization and the arts. Our present purpose, however, being to treat upon facts, we shall waive all theorising for the time being, and confine our remarks to simple facts and positive instruction. In future numbers we shall probably have something to say on the various theories above alluded to.

## GENERAL LAWS OF VEINS.

Whatever their origin these veins (or *lodes* as they are sometimes and perhaps more properly called) are, as a general thing, found to obey certain general laws. They are usually contained within clearly defined walls, and are generally found in "setts" or "classes," each individual of any given sett being approximately parallel to all others of its class. The different setts usually give evidence of different ages, the newest sett being found to have disturbed or displaced the older in passing across it. The different setts are usually known by the general line of their direction as the "East and West sett of veins" or the "North and South sett of veins." They are usually found most productive near their crossings, also at any point where the vein enters a new class of rock, a change in its mineral productiveness may be most confidently expected. The point where a "leader" or "string" comes in is usually improved by such contact. On the other hand a sudden enlargement of a lode, where it is not caused by the coming in of a feeder is almost invariably attended with comparative barrenness. The scattering of a lode into a number of small ones is also almost universally unfavorable. They are, of course, of more recent origin than the rock which they traverse, though their general characteristics and richness in mineral is often much affected by their passage from one class of rock to another. This latter fact would seem to imply that, to a certain extent, they are dependent for their mineral value upon the mechanical condition of the rocks which they traverse.

## TRUE VEINS.

As we have already stated veins or lodes are found traversing all kinds of rocks, stratified and unstratified, often passing from one to the other. They are also sometimes

found to traverse a space between two classes of rock, as between the slate and granite, metamorphic (rock changed by heat) and unchanged rock. Veins of this description are usually called "true veins," because they are much more reliable, more clearly defined, of greater linear extent, and generally much larger than veins having both walls composed of the same kind of rock. It is reasonable that these conditions should usually accompany veins of this description inasmuch as fissures between walls of dissimilar rock would naturally present less obstructions and disturbances and be more continuous in both length and depth, than fissures forced through a homogeneous mass of rock. True metalliferous veins are almost uniformly much more productive than other veins in the same neighborhood. The Comstock vein, in Washoe, is of this description. This is a condition in regard to quartz veins which should be more generally considered than has heretofore been the case in this country. It will, wherever it exists, be found to exert a most important influence on the productiveness and consequent value of the vein.

## IGNEOUS INDICATIONS FAVORABLE.

Valuable metalliferous veins of ore are often found in secondary and even tertiary formations, yet as a usual thing, they are found more universally productive and most reliable when they occur in the older and metamorphic rocks. We have the proof of this in our own state and adjoining territories. Those portions of California and the Eastern Slope, where is found the strongest evidence of ancient igneous action, have as a general thing proved most valuable in mineral developments. Indeed, the idea has been advanced by some, that no metalliferous veins exist entirely disconnected with igneous rocks. It is claimed by the advocates of this theory that whenever surface indications are wanting, metamorphic rocks will invariably be found at no great depth below.

## PECULIARITIES OF QUARTZ VEINS.

The study of quartz veins, to the mineralogist and miner, is most interesting and important, and one to which quite too little attention has been devoted in this country. In the hasty summary we are now giving we cannot do the subject that justice which its importance demands; but in future numbers we propose to come back to this head and treat more fully upon it.

Few veins exhibit their true characteristics upon the surface. The action of water and the atmosphere, resulting in the oxidation of much of their contents, and other disturbing influences upon and proceeding from the surface, not unfrequently lead to serious fallacies in judging of a vein in the early stage of its development. An important consideration in the study of veins is the changes which they undergo in their passage from one class of rocks to another. This matter, so far as we have learned, has never been much considered on the Pacific Slope, although it has long been acknowledged as one of much importance in nearly all other mining regions. We append the result of a few observations under this head from various authorities.

De la Beche in his survey of Cornwall says that granite and its modifications is always found near or at all localities productive of paying tin or copper mines; while lead, antimony, iron and zinc are found independent of and at a distance from granite.

In the Hartz mountains, veins passing from hard to soft slates lose much of their productive character; hard granites, as a general thing, are also found less productive than soft, or decomposed descriptions.

In the Copper mines of Lake Superior veins in hard greenstone are usually contracted and comparatively barren; but the same veins on entering the granular trap, a much more yielding material, become at once expanded, and improved in yield. This is especially the case with the celebrated Cliff and North American mines. The Copper Falls mine is highly productive and well defined in the trap, but on entering a belt of sandstone the vein is contracted to a mere fissure. Nearly all the veins of the Lake Superior region traverse different mineral planes, and in their passage through them are more or less modified, as noticed above. It will be perceived that instances above cited confirm the correctness of our previous remark with regard to the favorable nature of igneous rocks in mineral localities. We shall resume this subject in our next.

## THE SUPERHEATED STEAM PROCESS.

We have alluded once or twice to a process in operation in this city, for the extraction of gold by the use of superheated steam, and have witnessed the operation on several occasions. We understand that several of these machines have been ordered by parties who have thoroughly satisfied themselves with regard to the completeness of the process, and the machine will soon be subjected to a practical test both in Washoe and this side of the mountains. The process is the invention of Prof. Ryerson, of New York, a gentleman of large and practical scientific attainments, and is already in successful use in the mines at Pike's Peak. It is claimed by the inventor, and with good show of reason, that with the tailings from ordinary machinery a large amount of gold of the most minute microscopic fineness is constantly washed away, which can be readily taken up and saved by this machine. We can see no reason why every particle of liberated gold, however fine, may not be taken up by this process. We shall soon be able to give our readers the results of the practical trials to which the process is about to be subjected at the several points above alluded to.

THE BUSINESS OF GATHERING PITCH. We learn from Mr John Hart of this city, says the Marysville *Appeal*, that he has a large number of men engaged in tapping trees for pitch, in Butte county, the best points found yet being about two miles this side of Dogtown and at Nimshaw, four miles west of Dogtown.—He has eighteen thousand trees tapped, averaging two cuts or boxes to the tree, and making an aggregate of 36,000 boxes. His workmen are now cutting 500 additional boxes per day. Fifty-eight barrels of pitch of 42 gallons to the barrel have been brought to town thus far this spring, and from this time it is expected the average amount received will be 25 barrels per week.

EFFECT OF SHOT ON VESSELS.—A shot does not make a hole of its own size right through the wood, but indents it, the fibres springing back after the shock. Generally the course of a shot can only be traced with a wire, sometimes with a hole as large as a man's finger. The damage most often happens on the inside of the vessel, in splintering and breaking the wood, after the main force of the shot is spent. There is rarely an instance where a ship was sunk by a solid shot. Hot shot and shell do the mischief. This latter will sometimes make apertures of several feet through the sides of vessels.

SIZES OF STEAM CYLINDERS.—Much confusion and popular ignorance exists upon this point, and errors of statement are continually made respecting this or that steamship or boat. There are two vessels building in New York—one an iron-clad battery, the other a North river steamer; the iron-clad will have two cylinders each 100 inches in diameter by 4 feet stroke of piston; the latter vessel will have one cylinder 83 inches in diameter and 16 feet stroke of piston. The largest steam cylinder in any steamboat or steam vessel in this country, is 105 inches; the cylinder of the Metropolis—a Sound boat—is of this size, as are also those furnished to the Golden City (now building), and the Constitution belonging to the Pacific Mail Company; these vessels are the only ones that have cylinders 105 inches in diameter.

INTERESTING TO BOILER MAKERS.—According to the experiments made by Professor Fairbairn, the law of resistance for cylindrical tubes is this: A tube having the same strength of material, and being of the same diameter, will resist double the pressure to one of double the length; or collapsing power, other things being the same, varies inversely as the length and inversely as their diameter. Experiments made with elliptical tubes showed that in every construction where tubes have to sustain a uniform external pressure, the cylindrical is the only form to be relied upon, and that any departure from the true circle is attended with danger. The experiment also tend to confirm the conclusions heretofore arrived at, namely, that the strength of riveted joints of malleable iron plates are nearly as the numbers one hundred for the plate seventy for double riveted joints, fifty for single riveted joints.

Present indications point to a most abundant harvest throughout the State.



**THE ENGLISH IRON-CLAD FRIGATES**—Four of these vessels have returned from their experimental voyage to Portugal, and the naval report of the London Times says that the plates are loose, and that the vessels are not in a condition to go out to sea now. The impression of the writer seems to be that the fastening of iron plates to the wooden hull, will not answer the purposes desired. It appears as though our little fleet of Monitors were the most formidable iron-clad fleet afloat.

**TREASURE SHIPMENTS**—During the present year, up to the 30th ult., \$15,892,103 74 in treasure has been shipped from San Francisco, and for a corresponding period of time last year 10,864,760 92 was shipped—showing an increase of exports for the present year of over 5,000,000.

**A POWERFUL SHIP**—The Royal Oak, an iron-cased ship, is reported to be ready to leave Chatham, England, early next month. Her engine is of 800 horse power, and she is completely covered with four and a half inch armor, and has a turret shot proof, whence the captain directs all operations by means of Gishorn's telegraph, which communicates with the engine-room and steering apparatus. Her armament consists of 32 68-pounders, and two Armstrong 100-pounders; and the bow is constructed so that she can be used as a ram.

Within the last year over \$8,000,000 in gold dust has been received at the New York assay offices from Pike's Peak.

#### TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metalliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; that rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel, and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphuret ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make

the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

Our object is to furnish the miners of California with every class of information which shall be valuable to them in the progress of their calling and in the development of the mineral resources of the State, and we know of no way in which we can devote a portion of our time more to the interests of miners than in the manner here proposed. The only equivalent we ask is that they shall do what they reasonably can to sustain and improve the paper devoted exclusively to their interests.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector; and we have the promise also, at an early day—probably within a week or two—of a series of articles, under the head of "THE MINER'S LABORATORY," which will be prepared especially for this paper by one of the most skillful metallurgists on this coast, and which will be found of great value to the mining public.

#### NOTICE.

**Coso Silver Mining Co.**—The Office of this Company has been removed from the Stevenson House to Nos. 11 and 13 Court Block, No. 636 Clay street between Montgomery and Kearny. Entrance on both Clay and Merchant streets.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

## Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets, San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, Proprietors

#### Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STENOGRAPHY and ELECTROTYPING, Designs of every description—Buildings, Sketches of Towns, Machinery, Stamp Files, Seals for Plans or Colored Printing. Job Work executed with dispatch at low rates.

PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

### To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

#### MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

#### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

#### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

#### The Mechanic and Manufacturer!

Will be greatly benefitted by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

#### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

#### Terms.

To mail subscribers:—Four Dollars per annum.

#### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 50. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

#### Our Mint, its Rules, Charges and Operations.

For parting silver from gold when gold

is below 300-1000ths. fine ..... 3cts per oz.  
" from 300-1000ths. to 750-1000ths. fine. 7 cts " oz.  
" " 750-1000ths to 950-1000ths " 14 cts " "

#### DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight

301 " 500, 7cls, " " "

#### DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

#### BARs SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

#### DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

#### DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.



## PROGRESS OF THE MINING INTEREST.

The encouraging reports, noticed for a few weeks past still continue to come in. From every direction we hear that the miners are doing well. Progress and development appear to be the order of the day. The important results so generally obtained from those mines which have been properly opened on the Eastern Slope, is exerting a marked effect in urging on the development of many, which have hitherto remained quietly awaiting the results of other operations in their neighborhood. From Esmeralda, from the Coso region, from Humboldt, from Reese River, from Virginia and its surroundings, we hear but one report, and that of the most encouraging nature. The Reese River miners, satisfied from the developments at Humboldt, are already fully at work taking out rock to be in readiness for the mills which are now in progress of erection in that neighborhood, and according to present appearances will soon occupy a prominent position among the various mining localities on the Eastern Slope. There seems to be a growing confidence in these mines, as well there may be, if they yield any considerable quantity of ore like samples which have reached this city. The cities and towns in California are losing a large amount of population and considerable money in consequence of these late new and extensive discoveries, but we shall soon begin to get ample returns, especially in this city—for whatever wealth may be gathered up in those regions must flow into or through San Francisco before it can reach the regular channels of trade.

The rush over the mountains at the present time is without a parallel in any former period of the history of silver-land. The hotels are crowded with guests, the hills and gulches covered with prospectors and the streets of the principal towns with buyers of "feet."

The *Enterprise* of Virginia City estimates the present weekly transactions in the Mining Stocks at the various Stock Boards in that city at from \$600,000 to \$800,000 exclusive of outside transactions which are set down at \$75,000 to 100,000 weekly.

## ESMERALDA.

A correspondent at Aurora City, under date of April 30, writes as follows:

The "GEN HOOKER" Ledge situated on Silver Hill between the Utah and Antelope is turning out good pay rock. The shaft is down about 35 feet and the ledge averages three feet in thickness. The company are prosecuting the work vigorously and have taken out about 60 tons of rock which will be crushed immediately.

The "JUNIATA" Ledge situated on Martinez Hill is one of the oldest discoveries in the District. There are two shafts sunk on the ledge—one 60 feet in depth, the other 97 feet. The rock is similar to that of the Wide West, on Last Chance Hill. Eleven thousand dollars were crushed from this ledge during the winter of 1862, but the claim has been lying idle until the last month. It is now incorporated and will be vigorously worked during the summer. A specimen of the rock can be seen at the Pioneer Club Rooms, San Francisco.

The "MINA REAL" Ledge, situated East of the Pond and Aurora is being vigorously worked by the Company. The main shaft is now down to a depth of 40 feet and the Ledge is over three feet thick. The rock is similar to the Pond and Garabaldi. There are about 45 tons of rock taken out which proves very rich.

The "ALPINE" Ledge, situated on Middle Hill, is being worked, and the rock prospects rich in both gold and silver. The shaft is down to a depth of about 30 feet and the ledge is about 2½ feet thick.

The "GREAT BRITAIN" Lead is one of the oldest locations on Middle Hill. The new shaft is down to a depth of 50 feet. The ledge is over four feet wide and the rock is similar to the "Pacific" on the same Hill. The Company have 100 tons of rock taken out ready to be crushed.

The Esmeralda *Star* of May 2nd gives encouraging accounts of the progress of the work upon the Peck and Rowel Lode located on Silver Hill. They have a 4-foot vein in a shaft 25 feet deep, improving as they descend.

The PAUL TUNNEL, on the same hill, is now in 150 feet, and making good progress.

The RUTH WINDSOR TUNNEL, on the same hill, is in over 100 feet.

The MAMMOTH TUNNEL, on Middle Hill, is in over 275 feet. This is the largest tunnel in the district, being 8 feet wide and 7½ high, designed for a double track. This and the two previously noted have large and valuable claims for which they are running.

The *Star* also notices progress on the Bright Star and Aurora Borealis Lodes, each of which present encouraging indications.

The PRIDE OF ANTELOPE is yielding rock very much like the main Antelope. The Company hold 800 feet of ledge.

The NEW ESMERALDA Company are pushing their work day and night and are expecting to strike another large lode in a few days.

SOL LEWIS looks exceedingly well, and is being worked constantly. A new shaft is down and the rock looks very handsome.

MT. BRALEY is progressing finely; a tunnel is now in one hundred feet, and if the work is continued, day and night, they will reach the ledge by the first of June.

The LILY DALE have sunk a shaft upon their lode, and are taking out rock.

The PRIDE of the Wide West have sunk a shaft and struck a good looking ledge.

## WASHOE.

The reports from Virginia and the neighboring districts are losing none of their interest or importance. The confidence which operators there have in the value and permanency of the mines is sufficiently indicated by the heavy stock transactions above alluded to. The chief interest, at the present time in that region appears to be centered in and about Gold Hill, where most important developments are constantly being made.

The MONITOR DISTRICT.—Exciting reports have of late been coming in from the Monitor and Peavine Districts. The former is located on the East fork of Carson River. Gold appears to be the predominating mineral, although quite a number of ledges are being opened which indicate much value in silver. A great number of ledges have been located in this district, nearly all of which, so far as developments have been made, are exceedingly promising. The lodes are generally very heavy, and are in the hands of but a very few individuals. The Monitor men acknowledge that there are ledges in the Territory which assay better to the ton, but they hold that no entire district presents better indications. They have also a very important advantage in having an abundance of wood and water to say nothing of excellent coal indications.

Adjoining the Monitor is the ALPINE DISTRICT, which presents the same general characteristics with the Monitor.

The East Fork of the Carson, in the immediate vicinity of the mines has a rapid and very even fall, affording a large number of most excellent mill sites. These mines are in a direct magnetic direction from Virginia City and are supposed to be a continuation of the same series of ledges, which appear there. The ledges, which are large and well defined are usually found on high and narrow hills, affording most excellent facilities for drainage and working. There is much reason to believe that this will soon prove very valuable as a mining region.

## MINING IN CALIFORNIA.

The great rush over the mountains, caused by the recent extraordinary developments in Silverland, is being sensibly felt throughout the interior. Many of our mountain towns which have for many years been improving, with a steady increase of population, have come to a sudden stand still, and some are even on the retrograde. Of course such a state of things will be but temporary. Of the many thousand now on their way from the East, but comparatively few will tarry on the other side of the mountains. The great bulk of the immigration will find its way into California and serve to fill up the gaps now vacant by the absence of the silver hunters.

THE COPPER EXCITEMENT is also operating to a considerable extent in checking the movement Eastward, by opening up new fields for exploration at home. A large number of miners are now actively engaged in developing this new interest, with most flattering prospects of abundant success. The copper mines which were first opened are mostly in the hands of a few individuals, who are quietly prospecting their work without availing themselves of the benefits of the Corporation Act. It is well known that several of these

companies are already realizing large profits, while, if we are to judge of the recent advance in the price of "feet" in some of the incorporated companies, we shall soon be able to enroll several of these public institutions under the head of "Dividend Paying Mines."

GOLD MINING.—In the present excitement with regard to silver and copper, our gold mines have been almost entirely ignored, and it is only now and then that the eye falls upon a paragraph in an interior exchange, announcing a new gold strike or an extraordinary "clean up" of that once predominant mineral. Still the few paragraphs of that kind which do come under our notice are quite sufficient to assure us that the gold mines still continue to "give out" their accustomed yield. It is to be feared that capitalists in this city are not giving the mines within the State limits, that degree of attention which they merit.

COPPER SMELTING WORKS.—The Cali. Copper Co. will be ready to commence smelting in about two weeks. They advertise for ores, which they will purchase on delivery at their wharf at Antioch. Propositions for purchase will be entertained on ores of any grade above seven and a-half per cent.

It is said that some of the most distinguished engineers in France have approved a plan for a railway from Paris to Marseilles, by which the journey, which now consumes 18 hours, may be made in 1½ hours. The distance is 510 miles. The plan has been submitted to the Emperor for his approbation.

The hydraulic system, in which sliding is substituted for running on wheels, in which that proposed.

## GENERAL MINING STOCK REPORT.

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending May 9, 1863.

Names of Companies.	Total No. Shares	Shares per ft	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2400	—	—	2400	—	2500
Gould & Curry	4,800	4	500	—	—	3550	3500	—	3650
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	5,600	4	300	425	400	300	440	435	41
Potosi	2,800	2	500	—	750	750	500	—	550
Hale & Norcross	80	2	500	935	925	—	810	925	970
Sierra Nevada	3,000	1	500	—	55	60	—	60	—
Danely	8,000	4	500	395	390	370	350	360	37
Burning Moscow	4,800	2	100	165	165	160	150	150	140
North Potosi	2,000	1	250	—	42½	—	—	—	41
Charles Caney	3,000	1	250	—	—	—	10	—	—
Rogers, F. D.	1,200	2	125	—	38	40	40	40	4
Meredith	1,800	1	30	—	100	80	97½	95	8
Sacramento	1,800	1	500	—	60	65	70	75	7
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	—	2125	—	—	2000	—
Iowa	—	1	100	100	100	—	—	100	11
El Dorado	—	1	86	80	75	82	85	7	—
Norton	1,600	1	—	—	25	25	21	25	—
La Crose	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	38½	65	69½	50	54	4
Adriatic	—	—	—	8	7	9	7	8	—
Cedar Hill Tunnel	—	—	—	6½	6½	—	5	6	—
Mount Davidson	10,000	1	200	—	—	—	4	—	—
<b>ESMERALDA STOCKS.</b>									
Wide West	1,600	1	600	375	375	210	355	300	35
Antelope	1,200	1	500	—	300	200	200	200	20
Esmeralda	1,600	1	1000	45	45	35	—	—	—
Real Del Monte	4,400	1	400	160	100	150	105	150	12
Etna	1,200	1	100	10	—	—	8	—	—
Utah	—	—	—	—	—	—	—	80	—
Silver Hill	3,000	1	—	65	65	65	62	61	61½
Nevada	—	—	—	20	—	—	30	20	—
Federal Hope	—	—	—	1½	1½	—	1½	—	—
South Utah	—	—	—	50	—	—	—	55	—
Jenny Lind	—	—	—	6	7	—	—	—	—
Falls of Clyde	—	—	—	8	8	10½	—	10½	1
Sunbeam, S. W. ex.	—	—	—	—	2½	—	—	3½	—
Bamboo	—	—	—	46	46	—	41	41	—
<b>COISO STOCKS.</b>									
Josephine	—	—	—	21	21	21	21½	21	2
Coso	—	—	—	—	—	—	—	—	—
Willow Springs	—	—	—	13	—	15	15	15	1
Empire	—	—	—	22½	25	28½	22	25	—
<b>MEXICAN MINES.</b>									
Mina Prieta	—	—	—	—	—	—	—	—	—
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	—	—	—	—	50	—	—	45	—
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	—	—	—	8½	10	9	8	9½	—
Utica	—	—	—	—	—	—	—	40	—
Rhodes Diggings	—	—	—	30	—	30	35	31	—



## REMARKS

The Mining Share Market for the week has maintained quite an average degree of activity, although the amount of money which has changed hands has been comparatively small. Transactions have been confined to low priced stocks mostly.

Burnside has been the chief excitement of the week. 1172 shares, nearly one half the entire amount of this stock, has changed hands at rates varying from \$37½ to \$75. The sales commenced at \$37 and advanced steadily to \$75, on 30 days. From this point they commenced receding and closed the week at \$45. The advance in this stock was occasioned by telegraphic advices that a rich vein of ore had been struck, four feet wide. The subsequent decline was owing to advices that the tunnel had been closed. The excitement culminated on Thursday, on which day it was held in Virginia City at \$100, with \$90 offered.

Ophir has found no sellers, though it has been enquired for at \$2500. A dividend of \$18 per foot was declared on Wednesday.

In Gould and Curry the transactions have been confined to one foot, which sold for \$3500 on 30 days. It was offered at \$3700.

Savage has improved about \$200, but with light transactions.

Lady Bryan was quite freely dealt in early in the week at \$13. An assessment of four dollars per share having been levied on Saturday the stock dropped suddenly to \$9½. The Company has determined upon a thorough opening of the mine.

Lucerne has been slightly dealt in at \$8 @ 10. An assessment of \$10 per foot has been levied by the Directors, payable June 4th.

The Chollar, Daney, Burning Moscow, Chas. Caney and Norton have slightly declined.

Sacramento, Iowa and Meredith have improved somewhat over last quotations.

Hale & Norcross has been in fair demand at an advance of about \$125.

Yellow Jacket has been in demand on Thursday at \$60 @ 67½, an advance of \$150. Advices have been received that the suit in which this mine has been involved with regard to title has been decided in its favor.

Overman has also quadrupled during the week in this Market as well as at Virginia City.

Esmeralda Stocks continue to attract a large share of attention, with but very little speculative aspect. We refer to our record of transactions and Stock Board Report.

Humboldt and Reese River continue to gain favor in this market, and much interest is felt in the flattering reports from those sections.

Sheba finds buyers at \$48½, and is firm at that price. DeSoto is in demand at \$96, a slight decline. Peru sells at \$25. Moss at \$50 and Cuba at \$12½. Reese River company at \$3½.

## TRANSACTIONS IN SHARES, FOR THE WEEK.

## NEVADA STOCKS.

Hale & Norcross—8 at \$940; 4 at \$900; 10 at \$1000 b. 60 d; 20 at 975 b 30; 2 at 925; 10 at 965 b 30.

Burnside—10 at 37; 14 at 37½; 21 at 39; 10 at 45 b 30; 128 at 55; 9 at 46; 22 at 65; 19 at 62½; 5 at 65; 5 at 64; 10 at 67½; 28 at 70; 15 at 69½; 20 at 74 b 30; 40 at 55; 60 at 54; 16 at 56; 25 at 75 b 20; 10 at 67; 10 at 65; 20 at 50; 25 at 55; 15 at 70; 22 at 69; 3 at 67; 10 at 97½; 13 at 60; 10 at 55; 10 at 56; 5 at 55; 10 at 60 b 30; 20 at 56; 20 at 55; 15 at 60; 25 at 59.

Mount Hope—15 at 60; 10 at 52½; 20 at 55; 5 at 55; 5 at 54; 5 at 52½; 10 at 50 b 10.

Adriatic—50 at 8. El Dorado—10 at 87½.

Lady Bryan—21 at 11; 25 at 10½; 50 at 11; 55 at 10.

Bajazet—10 at 30 s 10; 40 at 30. 33 at 30; 10 lt 27½.

Chollar—20 at 480; 20 at 475 b 30; 16 at 440; 41 at 435. 10 at \$450.

Gould & Curry—4 at 3850.

Savage—5 at 2100; 6 at 2200.

Meredith—19 at 38; 40 at 40; 10 at 41; 50 at 40.

Crown Lead—5 at 6. Sacramento—25 at 70.

De Soto—5 at 120; 5 at 115; 5 at 112½; 16 at 100.

Overman—15 at 200; 5 at 225. Empire—10 at 27.

Pond—5 at 60; 10 at 70 b 30; 8 at 50 b 30.

Daney—40 at 415 b 30d; 40 at 412½ b 30 d; 40 at 420 b 30 d; 4 at 390; 25 at 405 b 30; 8 at 375; 12 at 370.

Burning Moscow—30 at 170; 30 at 168; 10 at 165; 20 at 175 b 30; 7 at 155; 40 at 170 b 30 d; 50 at 150; 2 at 160; 20 at 170 b 30.

Pride of the West—5 at 200.

Cedar Hill Tunnel—100 at 5; 100 at 5½ b 30; 30 at 5; 100 at 6 b 60.

Reese River—50 at 3½.

St George, V. D.—20 at 22½ b 30; 5 at 20.

North Potosi—5 at 30. Gov. Nye—20 at 12.

Madison—50 at 15—

Best & Belcher—40 at 425.

Dick Sides—25 at 425.

Cole—20 at 14.

Santa Rosa—20 at 10.

Pride of the West—5 at 200.

Lucerne—95 from \$8 to \$10.

Charles Caney—72 from \$95 to \$100.

Norton—90 from \$27 to \$30.

Red, White and Blue—215 from \$18 to \$16.

Nevada—130 from \$37 to \$40, 60 days.

Banner—20 at \$18.

Yellow Jacket—5 at 660; 2 at 680; 5 at 600.  
Mt. Davidson—26 at 5. Sierra Nevada—10 at 60; 1 at 60.  
South Burnside—20 at 9; 10 at 8¼; 25 at 9.  
Harrison—25 at 5. Spanish, No. 2—5 at 60.  
Porter—13½ at 10.

## ESMERALDA STOCKS.

Wide West—5 at 380; 15 at 375; 10 at 350; 5 at 370 b 30 d; 5 at 350.

Utah—10 at 100.

Bamboo—15 at 46; 20 at 44; 10 at 50 b 30; 10 at 47.

Falls of Clyde—30 at 10½; 25 at 10.

Bodie, Silver Hill—150 at 1½; 200 at 1; 20 at 50.

Bodie, No. 2—113 at 3½. Bodie Bluff—25 at 8½.

Willow Springs—50 at 13; 35 at 15; 20 at 17 b 30; 40 at 15; 10 at 16½ b 30; 10 at 17 b 30.

Josephine—15 at 23½; 30 at 21½; 5 at 22; 10 at 21; 53 at 21½; 38 at 23 b 30.

Coso—20 at 20; 10 at 21; 16 at 28; 10 at 25; 40 at 30; 10 at 29.

Empire—10 at 27; 20 at 26.

Union, Russ District—25 at \$2½; 10 at \$2¾.

Silver Hill—20 at 67½; 50 at 70; 15 at 67; 10 at 68; 55 at 70 b 30; 10 at 70½ b 30; 6 at 66; 10 at 68 b 30; 15 at 60; 25 at 65 b 30; 23 at 61; 10 at 62.

Tucker—50 at 2; 40 at 2.

Iowa—10 at 97½; 16 at 130 b 30.

1st N. E. Ex. Esmeralda—30 at 8; 20 at 8 b 30.

St. Louis—20 at 2; 150 at 3; 70 at 3½; 50 at 3½; 20 at 3½; 150 at 4½.

Utica—10 at 13½. Pond—10 at 70 b 30; 5 at 58.

Etna—51½ at 11. Peruvian—100 at 50c.

Gen. Hooker—10 at 10. Empire—16 at 40; 10 at 37½.

Su-beam—40 at 16; 10 at 17½; 20 at 15¼; 25 at 5; 20 5½; 45 at 6.

Esmeralda—25 at 46; 10 at 46; 15 at 48; 10 at 47½.

Mios Padre—5 at \$65.

Banner—20 at 18.

Peru—25 at 25.

Moss, Reese River—10 at 50.

Cuba, Kern River—5 at 12½.

## CALIFORNIA STOCKS.

Laurel Hill—20 at \$10; 25 at \$10¼; 25 at \$10; 20 at 9½; 20 at 10; 20 at 9.

Melones—10 at 124; 7 at 110; 8 at 130 b 30; 10 at 97½; 5 at 100; 5 at 115; 5 at 110.

## COPPER STOCKS.

Napoleon—1 at \$100; 20 at \$70 s 30.

Mammoth—25 at \$11.

Josephine—\$22½ bid in Stock Board, \$30 asked.

## VIRGINIA CITY STOCK LIST.

Corrected for The Mining and Scientific Press, Friday, May 7, 1863.

	Bid.	Ask'd		Bid	Ask'd
<b>Virginia Mining District.</b>					
Ashtland.....	\$ 10	12	Union.....	\$ —	—
Allen.....	95	—	U. S. Tunnel.....	5	6
Atchison.....	150	—	Utah.....	60	70
Alturas.....	55	60	Old Virginia.....	250	—
Baldy.....	65	70	Washington.....	10	—
Bajazet and Golden Era.....	20	25	Yorck.....	5	7
Burnside.....	90	100	Zouave.....	17	20
Burning Moscow.....	135	—	<b>Gold Hill District.</b>		
Beach-Paxton.....	225	—	Baltic.....	16	20
Bloomingdale.....	5	6	Bullion (consolidated).....	85	90
Croesus (Buchanan).....	250	—	Belcher.....	750	800
Cedar Hill Tunnel.....	6½	—	Branch Mint.....	7	—
Cole.....	20	—	Caledonia.....	35	40
Commercial.....	10	—	Dann.....	25	30
Consolidated Cedar Hill.....	4	—	Eureka.....	25	30
Dargun.....	3	6	Golden Gate.....	5	—
Empire.....	6	—	Golden Eagle.....	15	20
El Dorado.....	150	125	Hawkeye.....	12	—
Fairview.....	15	20	Koh-i-noor.....	250	—
Grass Valley.....	15	20	Leon.....	175	200
Hazel Green.....	5	—	Laboring.....	30	35
Harrison, Virginia Incorp.....	35	—	Mary Ann.....	55	60
Harrison San. Fran. Incor.....	30	—	North American.....	20	25
Irvine.....	50	—	North Ophir (nominal).....	—	—
Insurance.....	20	—	Overman.....	225	250
Kenosha.....	12	—	Oriental.....	5	—
La Crosse.....	10	12	Princess.....	65	75
Massillon.....	17	—	Siamon.....	20	—
McBee.....	25	—	Suezey.....	20	—
Milton.....	70	80	Sierra.....	40	—
Monarch.....	15	—	Union.....	—	—
Madison.....	15	20	Yellow Jacket.....	500	510
McHogan.....	6	10	Yolo.....	20	25
Oriental.....	3½	5	<b>Devil's Gate District.</b>		
Orcuta.....	15	—	Governor Nye.....	10	12
Pride of Washoe.....	30	35	Hawley.....	20	—
Poynton.....	40	—	Monterey.....	7	—
Recorder.....	17	20	Pride of the West.....	225	250
Santa Rita.....	45	50	Winemucca.....	10	—
Santa Fe.....	20	—	Wide West.....	12	15
St. George.....	15	—	<b>Flowery District.</b>		
Sierra Nevada.....	70	—	Atwill.....	—	—
Sacramento.....	62½	75	Adriatic.....	7	10
Shamrock.....	15	—	Lady Bryan.....	12	15
Texas.....	10	12	Harrison.....	5	6
			Uncle Sam.....	5	—

## WASHOE STOCK REMARKS.

For the week ending May 7, 1863.

The Stock transactions of the week have been unusually heavy, "so large" says the Enterprise of the 2nd inst., "that we hesitate to mention the supposed aggregate." Money has been abundant and freely offered. A number of very significant fluctuations have been noted, but the general tendency of prices has been upward. Some claims, indeed, have been doubled and even tripled. The chief interest still attaches to the neighborhood of Gold Hill.

Birdsall has been largely dealt in during the week at a heavy advance. \$50 was freely offered at first, without sellers. Subsequently offers advanced to \$55 and \$60, which were accepted. On Thursday last it stood at \$65 @ \$70.

Burnside has advanced during the week from \$35 to \$90. This stock is principally held in San Francisco. The cause of this sudden movement is fully detailed in our San Francisco stock Remarks.

El Dorado has been much dealt in. There are more buyers than sellers. It has advanced during the week from \$75 to 150.

Allen has gone up from \$65 to 95, at which latter price it is saleable. Sacramento has also met with slight advance, although we continue our last week's quotations.

Harrison, Virginia Incorporation, was in demand at \$35 @ 37 during the early part of the week and was dealt in to some extent at these figures, but subsequently declined to \$27. It is now, however, held firm at \$37, but without takers.

The Montour and El Dorado ledges have been made the subject of much prophetic speculation. The ledge, by many, is claimed as the genuine Comstock vein.

Ponce de Leon appears to be coming into favor. It has been saleable during the week at \$9 @ 12, going up to that figure from \$4. A considerable amount has changed hands at these figures.

Texas is saleable at \$10 @ 12. Utah has advanced about \$3. There has been enquiry for Cole at \$18 to 20, without sellers.

## GOLD HILL DISTRICT.

There is no apparent abatement of the excitement with regard to claims in Gold Hill District. The Market still continues both active and buoyant. The transactions in shares are heavy and significant, and the enquiry earnest.

Overman has struck fine ore and its stock has gone up from \$55 to \$225—more than quadrupled in a week!

Belcher has met with a still further advance of \$150, and is now quoted at \$750.

Bullion has been slightly fluctuating, several hundred feet having changed hands at \$65 to 80. We quote bids at \$80, holders \$90, on Thursday last.

Koh-i-noor is attracting much attention, with no stock in the market. We quote bids at \$250 @ 300.

Loon has been somewhat fluctuating. Its tendency the first of the week was upward, and a still larger advance was predicted within the week. These anticipations have not yet been realized and we quote it at a slight decline on last week.

Caledonia has advanced from \$25 to 35, with demand. Laboring has improved during the week from \$15 to 30—an advance of 100 per cent.

The Eureka, Golden Eagle, North America, Princess and Hawkeye, have been in request at slight advances over previous quotations.

Michigan is in demand at \$50 @ 60. This is an old location covering some of the best ground in Gold Hill.

## DEVIL'S GATE DISTRICT.

The Devil's Gate District is again looking up, and beginning to attract much attention. The Enterprise expresses the opinion that this much abused district will claim and receive its share of attention the coming Summer.

The Pride of the West takes the lead in interest just now, having gone up during the week from \$125 to 225.

The Wide West also advanced from \$10 to \$12 @ 15, and many other claims in the district are improving.

## ESMERALDA STOCK LIST.

[Corrected Weekly for The Mining and Scientific Press.]

	Bid.	Asked		Bid	Ask'd
Amador.....	\$ —	5	Heath.....	\$10	12
Atlantic.....	2	—	Herman Consol.....	16	—
Arctic.....	6	10	Home Check, Excelsior Dis.....	2	5
Antelope.....	—	—	Keeney.....	30	—
Alturas.....	15	—	Live Yankee.....	15	—
Etna.....	8	—	Lord Byron.....	7	12
Brazil.....	5	10	La Plata.....	7½	12
Rodie Bluff Consolidation.....	20	—	Main Esmeralda.....	65	—
Bodie Peak, Bodie District.....	—	7	Monroe.....	—	—
Bright Star.....	15	—	McKinstry Tunnel Co.....	10	—
Bamboo.....	—	50	Monte Christo, Tunnel co.....	40	—
Bullion (Van Horn Dist.).....	—	10	Mutual.....	20	—
Bodie Bluff, No. 1.....	12	18	Mount Braley.....	10	—
Bodie Bluff, No. 2.....	5	—	New Esmeralda Consol.....	3	—
Bunker Hill.....	14	15	Newtown.....	50	—
Boonaparte, Tunnel comp.....	20	—	Nevada, (Tunnel).....	20	—
Caucasian.....	—	6	Ozak.....	20	—
Chimay.....	—	10	Old Winnemucca.....	6½	—
Chilunhua.....	—	20	Paul Tunnel Co.....	5	—
Cape.....	—	5	Pacific.....	15	—
Davis, consolidation.....	—	5	Pond.....	—	—
Dargun.....	—	9	Pride of Antelope.....	10	15
Delta.....	—	10	Pera (two ft. to the share).....	15	—
East Essex Ex. Ural.....	—	12	Real del Monte.....	100	—
Excelsior, Excelsior Dist.....	—	5	Rebecca.....	10	14
Empire.....	—	28	Strawberry.....	20	25
Franklin, Tunnel.....	—	5	Silver Hill.....	125	—
Fullstaff.....	—	8	Silver Hill, Bodie District.....	5	—
Fullstaff, Consolidation.....	—	4	St. Louis.....	5	—
Fresho.....	—	9	Tiger.....	4	—
Falls of Clyde.....	—	9	Tucker.....	—	80
Great Eastern.....	—	10	Tennessee.....	20	25
General Hooker (Con.).....	—	22	Union Tunnel.....	20	30
General Jackson.....	13½	14	Utah.....	100	120
Garibaldi.....	35	40	Ural proper.....	—	500
Golden Harvest.....	—	5	Ural [extension].....	10	—
Golden Cross.....	25	—	William Tell.....	2½	—
Governor Seymour.....	—	25	Wild West.....	—	385
Golden Age.....	32	45	Winnemucca.....	—	6
Flawcra.....	—	—	X-Eliza and Countanthropio.....	—	—
Geward Tunnel Co.....	—	10	consolidated.....	1½	—



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value	shs per foot.	ass'ts to date	Name of Company	Locality of Mine	Name of Secretary	Locality of Office	Capital Stock.	Par Value	shs per foot.	ass'ts to date
RUTH WINDSOR TUNNEL CO.	Esmeralda District	T. L. Bibbins	305 Montgomery st	\$100,000	\$100	1	\$	MORAY, G. S. & Co.	La Paz, Colorado	G. J. Turner	606 Montgomery st	\$50,000	\$50	1	\$
ANTHONY SPUR, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	400,000	500	1	640	BADEN HIDE MINING CO.	La Paz, Colorado	G. J. Turner	606 Montgomery st	240,000	240	1	608
JEFFERSON, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	60,000	100	1	200	BADEN SLATE RANGE	Slate Range	G. J. Turner	606 Montgomery st	240,000	240	1	608
COOK, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	60,000	100	1	200	SAN FRANCISCO SLATE RANGE	Slate Range	G. J. Turner	606 Montgomery st	240,000	240	1	608
CEDAR, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	600	CAYUGA MINING CO.	Slate Range	G. J. Turner	606 Montgomery st	195,000	195	1	2 ft
SOOTAGAME, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	14,000	100	1	1,350	TRIMBON, G. & S.	Virginia District	N. Shiverick	Mer. st. Mtngy bldg	600,000	600	1	1
SENSE, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	360	COLE, G. & S.	Virginia District	W. E. Wood	123 California st.	1,600,000	1,600	1	15.00
RED WHITE & BLUE, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	360	DEVIL'S GATE DIST.	Devil's Gate	C. Stevens	6 Parrots Building	880,000	880	1	2.20
LILLY OF THE WEST, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	140,000	100	1	1	PEYTOA, G. & S.	Virginia Dist.	C. Stevens	6 Parrots Building	100,000	100	1	1
SEVICK, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	220,000	100	1	1000	CLEAR CREEK, G. & S.	Esmeralda District	C. Stevens	6 Parrots Building	1,100,000	1,100	1	1
BULLION, G. & S.	Van Horn District	T. L. Bibbins	305 Montgomery st	900,000	100	1	1	MASADORA, G. & S.	Sonora, Mexico	F. H. Waterman	618 Merchant st.	240,000	240	1	1
LAUREL HILL MINING CO.	Coahuila County	C. S. Higgins	410 Montgomery st	300,000	100	1	200	ONIDA, G. & S.	Esmeralda District	E. Daniels	Cashier Custom Hs.	600,000	600	1	1
UNION, G. & S.	Russ District	C. S. Higgins	410 Montgomery st	1,620,000	100	1	5,275	RHODES DIGGINGS QM CO.	Sacramento County	G. W. Touchard	414 Montgomery st	570,000	570	1	2.75
COMBINATION, G. & S.	Telesepe District	C. S. Higgins	410 Montgomery st	990,000	50	2	1,700	SAM WRIGHT, G. & S.	Aurora, Mono Co.	E. Worth	547 Washington st	700,000	700	1	70
BULLION, G. & S.	Russ District	C. S. Higgins	410 Montgomery st	400,000	50	2	23,000	SL. CLAIR, G. & S.	Aurora, Mono Co.	E. Worth	547 Washington st	120,000	120	1	1
WHITE & MURPHY, G. & S.	Virginia District	J. P. Nourse	Lucas & Turners bldg	128,000	600	2	68,000	FEDERAL UNION, G. & S.	Aurora, Mono Co.	J. F. Bailey	606 Montgomery st	300,000	300	1	60
MINNA PARKER, G. & S.	Sonora, Mexico	J. P. Nourse	Lucas & Turners bldg	128,000	600	2	68,000	SEVICK, G. & S.	Esmeralda District	J. F. Bailey	606 Montgomery st	120,000	120	1	1
BURNING MOSCOW, G. & S.	Virginia District	J. P. Nourse	Lucas & Turners bldg	128,000	600	2	45,000	JEWELL, G. & S.	Esmeralda District	Samuel Marx	610 Washington st	120,000	120	1	1
BUCKEYE, G. & S.	Silver City	P. S. Carter	415 Sansome st.	580,000	100	1	3,200	NEVADA COPPER MFG. CO.	Grass Valley, Nev.	John Armstrong	610 merchant st.	240,000	240	1	1.25
AMERICAN, G. & S.	Virginia District	R. L. Taylor	612 Washington st	160,000	100	1	1,000	CINCO SEÑORES, G. & S.	Sinaloa, Mexico	John Armstrong	610 merchant st.	600,000	600	2	2
FRANCIS, G. & S.	Slate Range Dist.	A. H. Clark	522 Montgomery st	1,500,000	500	1	1,000	JACK HAYES, G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	60,000	60	1	1
SLATE RANGE, G. & S.	Slate Range Dist.	A. H. Clark	522 Montgomery st	1,500,000	500	1	1,000	TENNESSEE, G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	60,000	60	1	1
ROCHESTER, G. & S.	Slate Range Dist.	A. H. Clark	522 Montgomery st	315,000	150	1	315	SAN PATECH, G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	100,000	100	1	1
PAIDOLPHIA, G. & S.	Slate Range Dist.	A. H. Clark	522 Montgomery st	315,000	150	1	315	FULTON, G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	100,000	100	1	1
NEW YORK, G. & S.	Slate Range Dist.	A. H. Clark	522 Montgomery st	315,000	150	1	315	MOLIER, G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bldg	100,000	100	1	1
CATARAUGUS, G. & S.	Slate Range Dist.	A. H. Clark	522 Montgomery st	315,000	150	1	315	LUCERNE MINING CO.	Gold Hill District	J. S. Paxon	Sansome street	240,000	240	1	1
ALBANY, G. & S.	Slate Range Dist.	A. H. Clark	522 Montgomery st	315,000	150	1	315	Mount Davidson G. & S.	Virginia District	F. A. Fabens	47 Montgomery Bldg	2,000,000	2,000	44 in	20.00
LADY BRYAN, G. & S.	Flowers District	J. F. Bailey	605 Sacramento st	500,000	100	1	5,000	Meredith, G. & S.	Virginia District	E. B. Holmes	712 Montgomery st	900,000	900	1.5	2
DESERT M. CO., G. & S.	Flowers District	David Wilder	522 Montgomery st	440,000	150	1	5,000	PIONEER CO., G. & S.	Coso District	E. B. Holmes	712 Montgomery st	450,000	450	1	2.75
ADRIATIC, G. & S.	Flowers District	S. R. Rooney	7 & 8 Gov't House	270,000	100	1	600	MANUELITO, G. & S.	Sinaloa, Mexico	Eddy	616 merchant st.	660,000	660	1	1
EVERETT, G. & S.	Humboldt, N. Ter.	H. H. Gager	Merch. st. mt. bldg	120,000	100	1	60	MOSS, G. & S.	Virginia District	R. T. C. Page	428 Montgomery st.	600,000	600	1	1
NORTH STAR, G. & S.	Humboldt, N. Ter.	H. H. Gager	Merch. st. mt. bldg	440,000	100	1	60	ST. CLAIR, G. & S.	Virginia District	E. B. Holmes	608 merchant st.	600,000	600	1	1
CRYSTOL, G. & S.	Silver Mt. Mono	H. H. Gager	Merch. st. mt. bldg	440,000	100	1	60	SOUTH UTAH, G. & S.	Esmeralda District	E. B. Holmes	608 merchant st.	400,000	400	1	1
ESTRELLA DEL MONTE, G. & S.	Humboldt dis. n. t.	H. H. Gager	Merch. st. mt. bldg	440,000	100	1	60	MELONES & STANISLAUS, G. & S.	Calaveras County	L. Francini	Lucas & Turner bldg	150,000	150	60	18 in
MANHATTAN, G. & S.	Humboldt dis. n. t.	H. H. Gager	Merch. st. mt. bldg	180,000	100	1	1,380	ALAMEDA CANT MINING CO.	Alameda County	L. Francini	600,000	600	1	6.00	
LYNE OAK COPPER, G. & S.	Gopher, Calav. Co.	J. H. Gager	Merch. st. mt. bldg	252,000	210	1	1,380	GOLD & CURRY, G. & S.	Virginia District	J. C. L. Wadsworth	2,400,000	2,400	1	1	
SIGMA, G. & S.	Humboldt, N. Ter.	H. H. Gager	Merch. st. mt. bldg	600,000	500	1	60	KATE, G. & S.	Humboldt Nev. Ter.	L. Francini	180,000	180	1	45	
OCCIDENTAL, G. & S.	Emma Francis dist.	H. H. Gager	Merch. st. mt. bldg	245,000	100	1	60	HOPE, G. & S.	Humboldt Nev. Ter.	L. Francini	180,000	180	1	45	
ANNE LAURA, G. & S.	Humboldt District	H. H. Gager	Merch. st. mt. bldg	600,000	500	1	60	OPHIR, G. & S.	Virginia District	Thos J. Lamb	Rm. 1, Express bldg	5,000,000	5,000	12 in	1
STARLIGHT, G. & S.	Humboldt District	H. H. Gager	Merch. st. mt. bldg	600,000	500	1	60	ST. CLAIR, G. & S.	Virginia District	E. B. Holmes	2,400,000	2,400	1	1	
ZEVA, G. & S.	Esmeralda District	William Winchester	Andrews, Mono Co.	100,000	200	1	1,380	Noble Copper Min. Co.	Calaveras county	E. B. Holmes	1,000,000	1,000	1	1	
ALHAMBRA, G. & S.	Devil's Gate Dist.	J. O. Strauch	315 Sansome street	100,000	200	1	1,380	NORTH POTASI, G. & S.	Virginia District	E. V. Joyce	Cor. Bat. & Wash.	550,000	550	250	1
WIDE WEST MINING CO.	Esmeralda District	S. Pattee	522 Montgomery st	1,300,000	500	1	14,700	NORMAN, G. & S.	Virginia District	J. H. Brewer	40 Montgomery Bldg	1,600,000	1,600	1	2.60
REAL DEL MONTE, CONS.	Esmeralda District	S. Pattee	522 Montgomery st	1,700,000	400	1	6,400	SIERRA NEVADA, G. & S.	Virginia District	J. H. Brewer	40 Montgomery Bldg	1,600,000	1,600	1	110.00
ESMERALDA MINING CO.	Esmeralda District	S. Pattee	522 Montgomery st	1,600,000	500	1	13,200	Early Dawn, G. & S.	Devil's Gate Dist.	J. H. Brewer	40 Montgomery Bldg	200,000	200	1	1
ESMERALDA, N. Extens'n	Esmeralda District	S. Pattee	522 Montgomery st	900,000	1000	1	6,750	PORTER, G. & S.	Lamb Lodge	R. C. Page	428 Montgomery st	300,000	300	1	1
SILVER HILL, CONSOLIDATED	Esmeralda District	S. Pattee	522 Montgomery st	1,600,000	500	1	27,000	ST. CLAIR, G. & S.	Virginia District	W. H. Clark	617 Clay street	120,000	120	2	12.00
ANTHONY, G. & S.	Esmeralda District	S. Pattee	522 Montgomery st	900,000	1000	1	1,000	RUBY, G. & S.	Star District	R. C. Page	617 Clay street	120,000	120	2	12
LOUISA, G. & S.	Silver City District	J. F. Pope	115 California st.	200,000	100	1	92.50	SILVER CITY, G. & S.	Silver City	O. Riden, Jr.	Cor. Bat. & Wash.	1,000,000	1,000	1	1
ROGERS, G. & S.	Flowers District	J. F. Pope	115 California st.	900,000	300	1	4,500	SUCOR, G. & S.	Gold Hill District	R. H. Waller	1 Montgomery bldg	240,000	240	1	12.60
ALAMO, G. & S.	Devil's Gate Dist.	J. F. Pope	115 California st.	300,000	100	1	4,500	SIERRA, G. & S.	Genoa District	S. P. Vandyeke	127 Clay street	500,000	500	303	28.00
BELLA VISTA, G. & S.	Lower California	S. S. Sprague	Cor. Cal. & Sansome	72,000	500	1	8,400	SILVER CITY QZ. MILL CO.	Silver City	E. Bauer	414 Washington st	1,200,000	1,200	1	1
BURNSIDE, G. & S.	Virginia District	E. C. Lovell	436 Jackson street	280,000	100	1	15,600	ALBION, G. & S.	Slate Range	W. H. Clark	224 Montgomery st	210,000	210	1	1.65
BADDER, G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	800,000	400	1	15,600	MILWAUKEE, G. & S.	Slate Range	W. H. Clark	224 Montgomery st	270,000	270	1	1
LOTA, G. & S.	Virginia District	R. N. Van Brunt	706 Montgomery st	1,250,000	100	1	150,200	MORROW, G. & S.	Slate Range	W. H. Clark	224 Montgomery st	270,000	270	1	1
LATROBE TUN & MFG CO.	Virginia District	R. N. Van Brunt	706 Montgomery st	80,000	50	1	150,200	ALBANY, G. & S.	Slate Range	W. H. Clark	224 Montgomery st	180,000	180	1	1
NORTON, G. & S.	Virginia District	R. N. Van Brunt	706 Montgomery st	80,000	50	1	150,200	MOUNTAIN VIEW, G. & S.	Slate Range	W. H. Clark	224 Montgomery st	240,000	240	1	1
REESSE RIVER, G. & S.	Reese River District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1	17,000	WASHINGTON, G. & S.	Slate Range	W. H. Clark	224 Montgomery st	210,000	210	1	1
SAD MARIAL, G. & S.	Sonora, Mexico	R. N. Van Brunt	706 Montgomery st	164,000	90	1	108,000	SACRAMENTO, DIST. G. & S.	Slate Range	W. H. Clark	224 Montgomery st	270,000	270	1	1
SAVAGE MINING CO.	Virginia District	G. B. McAuey	712 Montgomery st	1,600,000	1000	1	14,400	SANTA ROSA, G. & S.	Virginia District	Nelson Hudson	Front street	1,200,000	1,200	1	1
CALIFORNIA, G. & S.	Virginia District	G. B. McAuey	712 Montgomery st	1,600,000	1000	1	14,400	SACRAMENTO, G. & S.	Virginia District	S. W. Moore	408 California st.	900,000	900	1	1
CEDAR HILL, G. & S.	Virginia District	G. B. McAuey	712 Montgomery st	540,000	300	1	54,000	WILLOW SPRINGS G. & S.	Coso District	J. H. Sawyer	224 Montgomery st	270,000	270	1	1
CHOLLAR, G. & S.	Virginia District	G. B. McAuey	712 Montgomery st	540,000	300	1	54,000	WILLOW SPRINGS G. & S.	Coso District	J. H. Sawyer	224 Montgomery st	270,000	270	1	1
CHENANGO, G. & S.	Silver City	W. E. Dean	53 Montgomery Block	350,000	250	1	2,800	TESORO, G. & S.	Lower California	H. K. Kilbee	Cor. Sansome & Cal.	540,000	540	1	1
CROWN POINT, G. & S.	Gold Hill District	J. H. Jones	321 Front street	1,200,000	100	1	15,000	UNITED STATES, G. & S.	Virginia District	S. R. Rooney	7 & 8 Gov't House	200,000	200	1	18.00
CHARLES CANBY, G. & S.	Devil's Gate Dist.	George Evans	338 Montgomery st	270,000	150	1	15,000	VILLANAR MINING CO.	Lower California	D. R. Creigh	Cor. mer. & mont st	240,000	240	1	1
CORCORAN, G. & S.	Esmeralda District	John Woodthorpe	326 Clay street	60,000	100	1	15,000	WASHOE, G. & S.	Gold Hill District	D. A. Jennings	Jackson, Cor. Front	1,000,000	1,000	600	1
EMMETT, G. & S.	Esmeralda District	John Woodthorpe	326 Clay street	60,000	100	1	15,000	COSO, G. & S.	Coso District	E. W. Chambers	11 Court Block	1,950,000	1,950	600	1
DEVIL, G. & S.	Esmeralda District	John Woodthorpe	326 Clay street	60,000	100	1	15,000	TRIDE OF ESMERALDA, G. & S.	Esmeralda District	J. F. Bailey	606 Sacramento st	300,000	300	2	600
ISAACS, G. & S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	15,000	TABLE MOUNTAIN G. & S.	Calaveras County	H. K. Kilbee	328 Montgomery st	787,000	787	250	1
KUHLER, G. & S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	15,000	COLIGA G. & S. M. CO.	P. R. dis. Humb.	M. G. Elmore	528 Montgomery st	900,000	900	1	1
LIVINGSTON, G. & S.	Esmeralda District	James Neary	326 Clay st.	300,000	500	1	15,000	RIN VAN WINKLE G. & S.	Esmeralda District	M. G. Elmore	528 Montgomery st	300,000	300	250	3
VIRBARD, G. & S.	Esmeralda District	James Neary	326 Clay st.	60,000	100	1	15,000	SCHMELTZER, G. & S.	American dis. Humb.	M. G. Elmore	528 Montgomery st	300,000	300	1	2
LA CRUCITAS MINING CO.	Mexico	C. J. Brenham	Cor. Jack'n & Fruit	225,000	125	1	400	SAN FRANCISCO G. & S. M. CO.	San Francisco	M. G. Elmore	528 Montgomery st	1,400,000	1,400	600	1
DARK, G. & S.	Esmeralda District	Joseph R. Beard	4 Armyory Hall	1,600,000	200	1	350	FLOWERY MILL COMPANY	Flowers District	James Pick	707 Sansome st.	100,000	100	1	40
LILY DALE, G. & S.	Esmeralda District	Joseph R. Beard	4 Armyory Hall	240,0											



## Volcanic Smelting Furnace.

PERSONS DESIRING INFORMATION AS TO THE USE of a measurement properties of this Furnace, and its application to the smelting of ores, when a satisfactory result is desired, or all other means of reducing ores and smelting metals from the sulphurates, can obtain all the explanation and advice in regard to the same, and terms of sale of rights to use the same, on application to J. Stevenson or T. Ogg Shaw, or by letter to the address through the Post Office of San Francisco, or by mail to the office of Col. J. B. Stevenson, 214 Merchant Street, or at the office of T. Ogg Shaw, 214 Merchant Street, or at the office of T. Ogg Shaw, 214 Merchant Street, or at the office of T. Ogg Shaw, 214 Merchant Street.

Time required for reducing ores by this Furnace from three to eight hours, and the amount of fuel only tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form.

Attention of all interested in the subject is requested to examine the important results obtained by this process.

Persons wishing will be allowed to erect a trial Furnace of capacity for smelting one ton of ore or more, on giving an obligation to pay the usual fee for the right to it, should they continue to make use of the invention longer period than two months.

16 MRS. E. J. HALL, M.D., Proprietress.

## New Style of Lady's Buckle.

BOHM, INVENTOR & PATENTEE

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. Examine all other buckles in

Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine the Buckle at the Jewelry Establishment of

BRADYMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
407 Montgomery Street, San Francisco.  
FLORENCE & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold will be guaranteed as to its Strength and Durability.

W. BOHM, Patentee.

## LEANDER RANSOM, Civil Engineer AND SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

## STATE LOCATING AGENT.

And as such having the sale of

10,000 ACRES OF STATE SCHOOL LANDS.

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance

in installments of several years.  
OFFICE: Second floor of Express Building, N.E. cor. of Montgomery and California streets. oct-3m

## LAYNES & LAWTON,

IMPORTERS AND DEALERS IN

CROCKERY,

GLASS WARE,

FRENCH CHINA,

Coal Oil Lamps, Table Cutlery,

CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET,

[CORNER OF MERCHANT.]

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

## MYERS & DAGGETT'S Mining and Stock Exchange,

No. 231, B Street, Virginia City, N. T.

Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

Abstracts of Titles Furnished, Etc.

## The Occidental Hotel IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities.

The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

News Stand,

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office,

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

San Francisco, Jan. 1st, 1863.

## TO OWNERS OF WATER-POWER

Beth's Hydraulic Pressure Wheel

THE SIMPLE, COMPACT, STRONG AND

effective manner in which it is applied to any height of

fall, (3 feet to 300,) and to any kind of machinery, will

Save in Transportation, Material and Labor, from

25 to 50 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the inventor, apply at the

Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11

This Wheel is fully GUARANTEED. Jan 10-11



## SPECIAL NOTICES.

**Office of the Nevada Copper Mining Co.** March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty Cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees, J. ARMSTRONG, Secretary.

**Office of the Tennessee Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees, held April 20, an Assessment of One Dollar and Fifty cts per share upon the capital stock of said Company was levied, payable on or before Saturday, the 23d day of May, 1863. J. H. BLOOD, Secretary. [ma21] San Francisco, April 27, 1863.

**Office of the San Francisco Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees, held April 20, an Assessment of One Dollar (\$1) per share on the capital stock of this Company was levied, payable on or before Thursday, May 21, 1863. J. H. BLOOD, Secretary. [ma21] San Francisco, April 27, 1863.

**Office of the San Patch Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees, held March 30, 1863, an Assessment of Fifty Cents, (50 cts.) per share on the capital stock of said Company was levied, payable on or before Thursday, April 30, 1863. J. H. BLOOD, Secretary.

**Schmeltzer Gold and Silver Mining Company.**—At a meeting of the Board of Trustees of this Company, held April 11, 1863, an assessment of 25 cents per share was levied, payable in United States coin, to the Secretary, at the office of the company, No. 500 Montgomery street, on or before FRIDAY, April 17, 1863. ap20-1m M. G. ELMORE, Secretary.

## To Mine Owners.

**PARTIES having a Good silver Mine** and wishing for Machinery to work it for an interest in the Mine Will do well to apply at this office. No organized company need apply.

## WHEELER'S

### Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. nol6-tf ZENAS WHEELER.

## FULTON FOUNDRY &amp; IRON WORKS

HINCKLEY &amp; CO.,

MANUFACTURERS OF

## Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,

FIRST STREET,

BETWEEN MARKET AND MISSION. SAN FRANCISCO.

\* \* \* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done. PATTERN-MAKING in all its various forms. Prices low. D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

## WANTED,

**GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,**

By FRONTIER A. DEVERCY,

13 ap

487 Pine street, San Francisco.

## A. C. MORSE,

### Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS** with MINER S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

## Pacific Mail Steamship Company.

## NOTICE.

**ARRANGEMENTS HAVE BEEN MADE** by which shipments of

## Gold, Silver and Copper Ores

can be forwarded under through Bills of Lading from San Francisco to England, at reasonable rates. For further particulars apply to

A. B. FORBES, Agent,

28-tf Corner Sacramento and Leidesdorff streets.

## P. M. STEAMSHIP COMPANY.

## NOTICE.

**Until further notice, the Steamers of** Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above dates fall on Sunday, the steamer will be dispatched on the following Monday.

A. B. FORBES, Agent.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

**NATHANIEL GRAY,**  
General Furnishing Undertaker,  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

## Percy Douglas,

IMPORTER OF

## CROCKERY,

## FRENCH CHINA,

Glass Ware, Etc., Etc.

No. 421, MONTGOMERY STREET.

SAN FRANCISCO.

## DONAHUE'S

Union Iron and Brass Foundry,

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

The First Established in the State.

**MANUFACTURE STEAM ENGINES, SAW AND GRIST MILL MACHINERY, Boilers, Quartz Stampers, Amalgamators, etc., etc., at reduced prices. Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.**

PETER DONAHUE

## New Patent Agency.

**WE HAVE CONNECTED WITH THE** Publication of the "MINING AND SCIENTIFIC PRESS"

## The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an experienced Agent at Washington, which, together with our own experience of several years, renders the

## Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco. EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building. EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate. EWER & SMITH.

## PATENT RIGHTS.

Patent Rights Bought and Sold, At the office of the "Mining and Scientific Press" Agency. EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

## P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of May, 1863.

May 13th, - - - - - Steamer Orizaba

May 23d, - - - - - Steamer Golden Age.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

**A. B. FORBES, Agent.**  
Je4 Corner of Sacramento and Leidesdorff sts.

## Miners' Foundry

—AND—

## MACHINE WORKS,

First St., between Howard &amp; Folsom,

SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS MACHINERY**, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* \* \* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL &amp; KING.

San Francisco, February 23, 1863.

## PALMER, HANSCOM &amp; CO.,

## GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB &amp; CO.

## To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

**THE ABOVE COMBINATION SECURES THE MOST** complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching, floating gold and silver, known to be other wise lost. Made exclusively by

PALMER, HANSCOMB & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco.

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms, for the inside of Amalgamating Pans or Tubs, now are cautioned against making, buying, using or selling the same without his consent. W. A. PALMER.

## VULCAN IRON WORKS CO.

P. TORQUET.....MANAGER

R. IVERS. C. R. STEIGER. S. AITKEN.

## Steam Engine Builders,

Boiler Makers, Iron Founders and General Engineers,

Nos. 137 &amp; 139 FIRST STREET, - - - - - SAN FRANCISCO

STEAMBOAT MACHINERY built and repaired; also Saw Flour and Quartz Mills, Pumping and Mining Machinery etc., etc., etc.

Proprietors of Morse's Patent Fire Grates, JOYAL, FOURKEYTON and other Turbine Water Wheels with latest improvements.

## DEETKEN'S

## Chemical and Metallurgical Works

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REAS-** ONABLE RATES. ALL THE GOLD EXTRACTED BY CHEMICAL process. Yield of Sulphurets from 20 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose. nov8-3m

## LEWIS COFFEY AND RISDON,

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practise Boiler Makers. All orders for New Work, the repair of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets  
Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON.

## JAMES PHELAN,

(LATE J. &amp; M. PHELAN.)

IMPORTER AND JOBBER,

## Wines, Liquors, Etc., Etc.,

Nos. 616 &amp; 618 Front street,

Between Jackson and Pacific Streets,

Established 1849. SAN FRANCISCO.

All Goods Guaranteed. Orders Solicited  
TERMS LIBERAL. Jan. 1-11.

## THEODOR KALLENBERG

## Maker of Models

FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.;** Stamps, Dies and Die Sinking, Embossing Stamps.

Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
San Francisco.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

I. W. R. & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, MAY 18, 1863.

NO. 29.

## SPECIAL NOTICE.

We wish it distinctly understood that all the interest which Julius Silversmith ever had in the MINING AND SCIENTIFIC PRESS, ceased in November of 1862. EWER & SMITH are now the publishers and proprietors.

## OUR MECHANICAL INDUSTRY.

All our large machine-shops and foundries are at this time most active, and driving their machinery to the utmost in filling their orders. There are contracts now in active progress of completion from nearly every section of the Pacific Slope, from below Mazatlan in Mexico to Oregon on the north, and throughout every central portion, even to the distant regions of Humboldt and Rease River.

### THE VULCAN IRON WORKS.

We recently paid a visit to the Vulcan Iron Works, on First St., which are now under the management of PAUL TORQUET. At these works we found a large quantity of machinery in all stages of construction, from the pattern shop to the finishing room. This establishment is prepared to answer orders of every description in the line of Steam Engines, Boilers, Foundry work generally and the necessary wood-work to accompany the same. Like all our other foundries and machine shops this, also, is crowded with business, and constantly enlarging the area of its shop room. Their works already cover a very large area, which is reckoned by acres.

This firm at the time of our visit were just putting the finishing touches upon one of the largest orders for mill machinery ever given out in the State. The total cost of the same was \$30,000, and the whole was finished in *forty days* from the signing of the contract. This machinery has been constructed for the Las Cruzecitas Mining Company, a recent organization, formed in this city, for the purpose of working a mine located about 125 miles from Guymas. This is one of the old Mexican mines, worked years ago by the Spaniards and long since abandoned for want of machinery or energy to follow it below the water level. The machinery which has been constructed for this company consists of an engine with an 18-inch cylinder, and  $3\frac{1}{2}$  feet stroke, capable of being worked at 90-horse power. This, we believe, is the largest stationary Engine ever constructed in California. The Main shaft is six inches in diameter where the power is taken from the engine. The mill consists of five batteries of five stamps each—25 in all. Each stamp weighs 612 lbs. The length of the engine-bed is 21 feet. The fly-wheel is 16 feet in diameter and weighs over 7000 lbs. Three boilers, 42 ft. long, with five five-inch flues each and a fire surface of 960 square feet, will be employed.

The process to be employed at this mill is that known as the "Freyberg Process." 24 amalgamating barrels will be used, capable of holding 200 lbs. of ore each. The entire weight of machinery, including the wood work, which was also made at this establishment was 90 tons. It went down by the Oregon on her last trip.

A large amount of other machinery work was also in pro-

gress of construction, as indeed, is the case all the time, at this establishment. The energy and skill of San Francisco machinists is limited only by the demand upon their efforts and genius. The day is not far distant when the machine shops of this city will be prepared to undertake anything within the range of mechanical possibilities. We propose to continue our notices of individual establishments from week to week, and shall endeavor in our progress through the various foundries and machine shops to collect a fund of statistical information, for embodiment in tabular form, which shall be valuable for reference.

We regret exceedingly that the former proprietor of the MINING AND SCIENTIFIC PRESS, could not have been allowed to rest in peace and quietness, "after life's fitful dream was over;" but some luckless wight, like "Banquo's ghost," will not down, and has set him up, with other notables, in caricature. And to further illustrate, has used the name of the MINING AND SCIENTIFIC PRESS, which paper *Silversmith* has had nothing to do with since November last.

At first we were inclined to be angry and kick the fellow who thus should seek to bring ridicule upon our labors; next we thought of the law, but soon learned of the utter irresponsibility of the parties, and upon mature thought, concluded to let the matter rest, hoping that the Artist, the Vendors, "Emperor Norton," "the Fat Boy," the "Handsome Boy" with the tooth brush, the "Rag Man" and all the others, will meet at last, where "grub" is free, with "Bummer and Lazarus" to lick the tears from their eyes.

The exports of treasure since the 1st instant, have been as follows:

May 2—Per Constitution .....	\$1,010,189 06
May 2—Per Eberhard, to Manila .....	15,000 00
May 5—Per Oregon, to Mexico .....	3,950 00

Total since 1st inst. ....	\$1,029,139 06
Previously this year .....	15,892,103 74

Total since January 1st, 1863. ....	\$16,921,242 80
Corresponding period of 1862. ....	12,293,139 35

Excess this year .....	\$4,628,103 25
------------------------	----------------

The coinage at the Branch Mint in this city for the month of April was—

Gold .....	\$1,710,000
Silver .....	69,000

Total .....

A communication from "J. P." at Copperopolis, came to hand too late for insertion this week. It will appear in our next issue. The writer is a practical copper miner, and his letters will be read with interest and profit. Practical suggestions and hints are what we want, at this time, especially upon matters pertaining to the growing interest of copper mining. We are also indebted to the same party for the loan of a volume of "Lamborn on Copper," from which we shall, from time to time, extract whatever it may contain of value to the copper miner and prospector.

**CORRESPONDENCE.**—In order to make room for the valuable and interesting correspondence which has come to hand the past week, we have been obliged to omit our usual mining summary. Its loss, however, is more than made good by the varied and valuable mining information contained in our Humboldt and Amador County letters.

We would call especial attention to the letter of "MINER," which contains several suggestions worthy of thought, by all practical miners. Correspondents will also do well to consider that portion of it which relates to them. The necessity of a common medium of communication, and the value of an interchange of ideas and the results of experimental mining operations, is especially worthy of consideration. The columns of this paper are open to all such communications. We trust "MINER" who has proved himself so apt at suggestions, will not forget to put them in practice also. We infer that he is not altogether without an experience, which would be valuable to his fellow miners. Let us have that to begin with. It may serve to call forth other criticism, or some other experience, which will be of value to the mining public generally.

Our Amador correspondent gives a very interesting description of the Oriental Copper mine, describing its varied and changing appearances as the workmen descended upon its dip. The characteristics of this vein are worthy of study by operators in other localities. Similar descriptions of other characteristic veins, would be read with interest and profit. Copper veins present a much wider and more intricate field of study than gold, and we should be pleased to hear from correspondents in such localities.

Our Humboldt correspondent, "QUARTZ," gives us quite a detail of mining progress in the Buena Vista District, and promises to furnish our readers similar information with regard to other districts in that interesting region. "QUARTZ" is a man who never promises what he does not intend to perform. His letters will be found always reliable.

**AN ITEM FOR GRAY-HEADS.**—An English writer has recently asserted that an undue proportion of lime in the system is the cause of premature gray hair and advises to avoid hard water, either for drinking pure or when converted into tea, or coffee, or soup, because hard water is always impregnated with lime. Hard water may be softened by boiling it; let it become cold then use it as a beverage. It is also stated that a liquid that will color the human hair black, and not stain the skin, may be made by taking one part of bay rum, three parts of olive oil, and one part of good brandy, by measure. The hair must be washed with the mixture every morning, and in a short time the use of it will make the hair beautifully black, without injuring it.

A London paper says, at present 110 mails pass through the pneumatic dispatch tube from the station to the district Post Office during the day, and not only letters, but but trucks of iron of the weight of five tons have passed through, and adventurous visitors now and then perform the journey to their delight.



## MINING CORRESPONDENCE.

## COPPER MINING IN AMADOR COUNTY.

We give below the concluding portion of a private letter from an old friend and neighbor, then, like ourselves, not overburdened with this world's goods, but now owning large interests, in several of the most valuable copper mines in the State. The writer, the Rev. I. B. Fish, it will be remembered by some of our readers, was the fortunate discoverer of what is now known as the Oriental Copper Mine. Mr. F. in company with two friends, was passing along the road on horseback, when observing some peculiar quartz croppings, he dismounted and to his astonishment, found that the "croppings" before him consisted of copper ore of most astonishing richness. Of course the travelers lost no time in staking off the ground and taking the necessary steps to secure their discovery. The fact that such immense mineral wealth should have remained undisturbed and unnoticed for so many years, on the direct line of a greatly traveled thoroughfare, affords another evidence of the importance of an extended mineralogical education among the people of California. The importance and value of this discovery is quite closely foreshadowed in the interesting letter which we subjoin. We shall be pleased to hear from our correspondent often, and to receive the promised call whenever he may visit this city:—

JACKSON, CAL., MAY 9, '63.

Very unexpectedly, I am involved quite deeply in mining operations. I was one of the discoverers of the *Oriental* Copper lead, in the Forest Home Mining District of Amador County, and am a stock holder in the Oriental Co., and in several other good leads in this county. And all quite unexpectedly. Messrs. McKim, Trowbridge and myself discovered the *Oriental Lead* on the 10th of Feb. last. Heavy and beautiful Gosson croppings were seen bulging out high and boldly, in a straight line between well defined, gray granular trap walls, lively with mineral sulphurets, for a distance of one hundred feet. At three different points, between the Gosson croppings, we found boulders of rich and beautiful copper ore, which had doubtless been formed by the working of gasses from below. [Our readers will find the probable solution of this phenomenon under the head of our Miner's Laboratory, next week—Ed. Press.] On the 17th of Feb. we incorporated the company, estimating the value of the mine of 1400 feet at \$100 per foot. We now have a shaft down on the lode, thirty feet deep, in which, through the first twenty-five feet, we found almost every variety of ore except the solid oxides and sulphurets. At the first we found most beautiful *malachite*, then the red green, and blue rock ore, or "horn blend," which assayed at *Molitors* in San Francisco, 42½ per cent copper, and also beautiful masses of solid green sulphate of copper. But at the depth of twenty-five feet these variations gave way to white, solid, live mundic, a vein of grey copper ore, and a black vein with silver lustre. Of this latter we had a piece assayed at *Molitor's*, which to our surprise yielded traces of gold, \$62 37 of silver to the ton, and 15¼ per cent. of copper. Now at the depth of 30 feet we have a vein of 6 feet in width, of solid grey, yellow and black oxides, and sulphurets of copper, with a vein of grey silver ore with apparently little traces of copper next the east or head wall. In all a vein of saleable ore, eight feet in width, and widening. This is a most remarkable mine and now its real value is more than that put upon it in the incorporation. The office of this company is in Jackson. Wm. L. McKim is Sec.

The Cosumnes company, also incorporated, hold 100 claims of 200 feet each, of two leads, running west of and parallel with the *Oriental*. They also have an immensely rich mine. Have already out several tons of first rate ore, of almost every known variety, and are now making shipments. There are also several other companies in that district, opening onto splendid ore—one of which is the *Exchange* company, on the Ledger lode. A dozen or more companies have splendid prospects.

Of the Newton Co. near Ione Valley, I may write you soon. This mine is opened to the depth of nearly 200 feet, and is proven rich beyond calculation, and apparently inexhaustible. In it copper was first struck at the depth of about 75 feet. I cannot now, but if you please I will as

soon as I can gather together the facts, give you a more particular account of the number and value of copper claims, and mines in Amador Co. I. B. Fish.

## COMMUNICATION FROM A PRACTICAL MINER.

A practical and intelligent quartz miner operating near Virginia City, writes as follows:—

EDITOR MINING AND SCIENTIFIC PRESS:—I notice a large amount of "Mining Correspondence," published in the various journals of your city and in papers, generally, throughout the state, but it is seldom that these communications contain anything beyond mere common place remarks about the general appearance of the country, an enumeration of a few companies or claims, in which, it is presumable, the writers are more or less personally interested, and perhaps the announcement of a new discovery in the neighborhood where the letter is dated. The information usually contained in these letters is of little or no practical value. There are two classes of information which are especially valuable to miners and persons, interested in mining operations.

First, the miner is anxious to gain some practical information with regard to the various processes of working ores, and to learn the indications by which these ores and minerals may be discovered and made known to the prospector.

If miners would communicate through the Press, their experience in working the various kinds of ores, and thus compare notes with each other, the result would be the diffusion of a vast amount of information which would be of much practical value. Now why is not this done? Whenever three or four mill men or mining Superintendents meet, the subject of their mutual, individual experience, is almost sure to form an important topic of conversation. What man is there, who does not admit that he gains a large amount of information in visiting different and distant mining localities and comparing notes with others engaged in the same class of operations? Why not then make this a subject of intercommunication through the press? There is scarce a quartz miner in the state, who has been engaged for any length of time in the business who has not tried a great many experiments, and operated with different kinds of machinery—differently arranged batteries, various kinds of amalgamators, pans, etc., etc. Now this experience made public, cannot fail to be of benefit to somebody. If it does nothing more it will serve to get up an increased interest in the business, and stimulate a spirit of enquiry and invention which cannot fail to be of great general benefit.

You, Mr. Editor, have frequently alluded to different kinds of machinery and processes, which have been devised, and have sometimes expressed your opinion of them. But that is not altogether what we miners want. We want to know what those persons who are using that machinery think of it. We want the practical information, which can only be derived from the mill or the mine—that's what we want. [Our correspondent is sensible and hits the nail squarely on the head, every time.—Ed. Press.]

I see by the last number of your paper which I have received, that you propose to give us some information, about prospecting, a knowledge of minerals, etc., and that you have commenced a series of articles under what you call "the Miners' Laboratory," which you propose to continue. That is a kind of information which I think you can pick up for us among your books and libraries, which may be valuable to us working miners and especially to prospectors. I shall read your articles very carefully, and, I trust, derive much information from them. But when it comes to talking about "processes," mining, machinery, etc., I think, with all due allowance for your editorial judgment, that a little practical information, from persons who are actually employing these processes and using the machinery described, will be of more real service to us miners, than that class of information derived from any other source. [Our correspondent is right again.]

Another thing, Mr. Editor, we miners are generally pretty hard working men and can't afford either the money, or the time to take and read all the papers in California, to see what all the miners have to say about this business and experience. If we read our local paper and one other, say a commercial paper, from your city or state, and then take the MINING PRESS, it is about all we can manage. We want our local paper for its local news; we want a commercial

paper for general intelligence, and we want the MINING PAPER, as an indispensable necessity to keep us posted and fully up to the times in all matters of mining interest. Now the habit which mining correspondents have of sending their communications promiscuously to all the papers in the state, it appears to me, is "a very bad habit," and a very inconvenient one to those of us who desire to keep posted in such subjects; because, to do so, we must open a reading room, and file all the principal papers in the state, and sift out an immense amount of chaff to get a little wheat. Now as we have a mining paper, why cannot miners use it as a common medium of communication with each other? [Our correspondent puts a very sensible query.] But my letter is getting, I fear, quite too lengthy for your columns. I have a number of other suggestions which I would like to make, but for fear of wearying your readers, I will defer them till another time. Yours, truly,

We hope to hear from "MINER" often. [Ed.]

## HUMBOLDT CORRESPONDENCE.

UNIONVILLE, N. T. MAY 1, 1863.

EDITOR MINING AND SCIENTIFIC PRESS.—When I left San Francisco I promised to give you and the readers of your valuable paper an occasional letter from this section, and so far as I am able I will make my promise good. It has been so short a time since my return that you must be content with a very short and impartial account of the mining operations that are going on in this region. I find, upon my return, our mountains and valleys dressed in the beautiful robes of spring, our little village presenting a cheering aspect, and our miners, with cheerful and smiling countenances, with their sleeves rolled up and pitching into their ledges.

## PROGRESS OF THE MINING OPERATIONS.

The Peru Company, on the Peru ledge, are running a tunnel to open their claims. The tunnel is now in 45 feet. The Nevada company, on the same ledge, have their tunnel in upward of 100 feet and the work still progressing. The Mars company are sinking a shaft on the end of their tunnel. The shaft is now down over 60 feet, and they are taking out some very rich rock.

The Logan company, on the Manitowac, are sinking a shaft on their claims with fine prospects. The shaft is now run thirty feet deep. The Dubugne company on the same ledge are taking out some very rich rock for shipment to San Francisco. The Sargent company are putting their tunnel through as fast as possible. They are within fifteen feet of the ledge. The Cincinnati tunnel is in seventy-five feet. The Rising Sun tunnel is in one hundred and seventy-five feet. The Maine ledge has a shaft thirty-five feet deep. The ledge is four feet wide and nearly all of it very rich mineral. The Alba Nueva tunnel is in two hundred and seventeen feet, with a shaft sixty feet deep at the end of the tunnel. The National has a shaft eighty feet deep on their ledge. This company have about forty tons of ore at the mill and about the same amount at their shaft. The Governor Downey has a shaft on their claims forty-eight feet. The Mary Bell tunnel is now in two hundred and eighty feet.

The Eagle tunnel is in over sixty feet. The shaft on the Lewis Cass is now down over sixty feet on the ledge. The Adams tunnel on the first north extension of the Mars ledge is in over one hundred feet. The Shasta company running for the Alba Nueva and the Governor Downey ledge have their tunnel in two hundred feet. The Delerio, Flora Temple, Brutus, Independence, California, Jackson, St. Louis, and Kingston ledges are all being opened either by tunnel or shaft.

The Bloomfield company on the Marblehead ledge have recently struck some very rich ore. The Hamlin company are going to commence their shaft in a few days. This ledge is over four feet wide and immensely rich. It is a recent discovery and the fortunate owners feel confident of realizing an immense fortune from their claims, and "Quartz" thinks that they will not be disappointed. A very rich ledge called the "Unknown" has recently been discovered by R. G. Ferguson who is a very worthy and industrious old gentleman. The Schuykill company are now sinking a shaft on their claims. This ledge is between five and six feet wide and some of the rock is immensely rich. I have seen speci-



mens of this rock that were over one third pure silver. [See have we—Ed. Press.]

#### STAGES—THE FIRST NEWSPAPERS.

Langton & Co. are now stocking the road between this place and Carson and Virginia Cities for a tri-weekly line of stages. They have been running a weekly stage only, during the winter, but travel is increasing so rapidly on this road, that we shall soon require a daily line, and Sam. Langton and Capt. Ayer are just the men to keep up with the wants of the country in the Stage and Express line. Our town can now boast of a printing office. The first number of the paper to be called the "Humboldt Register" will be issued tomorrow. Humboldt will now be able to speak for herself through the press.

#### PROSPECTING, ETC.

Considerable prospecting is now going on in the various mining districts, especially in Alabama and Table Mountain districts. These districts are situated on the range of mountains east of the Humboldt range. There is plenty of timber there which will be of great advantage in working the claims. The Silver Cord is the name of a very rich ledge located in Table Mountain district. The ledge is over five feet wide and assays over five hundred dollars per ton from top rock. The Sulo ledge in Alabama district is another rich ledge and assays very rich, but we are unable to give the figures. The Batavia, Oro-fino, Telagrae, Missouri and Humbag are all very rich and well defined ledges. The owners of the last named ledge are so thoroughly convinced that the ledge is immensely rich that they have no fears of its losing its reputation on account of its name.

#### MILLS WANTED.

We need many more mills here and I wish some of the intelligent capitalists of your city could be induced to pay our country a visit and see for themselves.

As I informed you in the beginning, this letter must necessarily contain only a partial account of mining operations here. I have confined myself principally to Buena Vista district, for the reason that I have been unable to hear from the other districts since my return. In my next I will endeavor to give you an account of them. All of the districts are rich and your readers shall be informed of them occasionally by

QUARTZ.

#### TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metalliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; that rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel, and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphuret ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties

of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

Our object is to furnish the miners of California with every class of information which shall be valuable to them in the progress of their calling and in the development of the mineral resources of the State, and we know of no way in which we can devote a portion of our time more to the interests of miners than in the manner here proposed. The only equivalent we ask is that they shall do what they reasonably can to sustain and improve the paper devoted exclusively to their interests.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector. These articles will be published under the head of "THE MINER'S LABORATORY," and will be found of great value to the mining public. [Mining and Scientific Press, April 20.]

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the Press, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the Press for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

## Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - Proprietors

#### Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOTYPING and ELECTROTYPING, Designs of every description—Buildings, Sketches of Towns, Machinery, Stamp Mills, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

#### MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

#### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

#### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

#### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

#### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

#### Terms.

To mail subscribers:—Four Dollars per annum.

#### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

#### EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

#### Our Mint, its Rules, Charges and Operations.

##### For parting silver from gold when gold

is below 300—1000ths. fine . . . . . 3cts per oz.  
" from 30—100ths. to 750—1000ths fine. 7 cts " " oz.  
" " 750—1000ths to 950—100ths " 14 cts " "

##### DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold continued for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight

301 " 500, 7cts, " " "

##### DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

##### BARs SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

##### DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

##### DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.



## THE MINERS' LABORATORY.—NO. III.

We closed our chapter under this head for last week somewhat abruptly while discoursing upon the "Peculiarities of Quartz Veins." We have stated that these veins are usually found in "setts" or clusters. California is no exception to this rule. The general direction of the older class of quartz veins in the auriferous districts on the western slope of the Sierra Nevada is north and south; the east and west series of veins is more recent and may be called secondary. Mr. Remond of this city, who has paid much attention to the geology of the quartz veins of this state, remarks that "the metalliferous character of the secondary quartz veins is worthy of note. They bear gold, often in a crystallized form, which is very rarely the case in lodes running north and south. The numerous threads or minute veins crossing them contain much galena, in small leaf-shaped masses, and sometimes in cubic crystals, with more or less silver. These lodes also contain much white iron pyrites, with some arsenical and copper pyrites." The following paragraph, which like the one above quoted, was written some two and a half years since, for *L'Echo du Pacifique*, and prophetic at the time, has since been fully verified by actual discoveries.

"The combinations of these different metals suggests the possibility of the discovery of silver mines. Some specimens taken from the quartz mines of Soulsbyville, resemble the argentiferous ores of Washoe. At Washoe the silver is mixed with lead, iron, arsenic, copper and a little antimony, all the metals being in a condition of sulphurets. At Soulsbyville, the iron and lead predominate, and the other metals are in smaller quantities, with a total lack of antimony."

No other portion of the world has been so carefully studied with reference to its metalliferous formations as Cornwall and Wales, and it has been asserted with much confidence, that a description of these veins would, generally speaking, suffice for those of every other portion of the globe. So far as their direction, length, depth, and dip are concerned, the assumption is doubtless quite correct, but with regard to their contents, we apprehend quite distinctive characteristics will be noticed. No one who has acquainted himself with the quartz veins on the two slopes of the Sierra, can have failed to notice most marked and distinct characteristics between the two. Other peculiarities may be noticed between those and the veins which are found far out toward the interior of the "Great Basin," and others still more marked when we reach the opposite rim of the Great Basin in the neighborhood of Pike's Peak, as will be seen from the following extract which we gave in our issue of April 20th, from a correspondent of the *Territorial Enterprise*.

"The Pike's Peak ores contain no quartz. They are iron pyrites, more or less mixed with copper pyrites, lead, antimony, etc. \* \* \* On sinking upon this no veinstone whatever is found. The vein is a simple crevice in the granite bed rock filled with pyrites."

In fact almost every vein has much that is peculiar to itself. Perhaps the most simple of metalliferous veins are those known as "gold-bearing," and it is to those, almost exclusively, until within a short period, that the miners of California have chiefly paid attention. Until after the wonderful developments of the Comstock lead in Washoe, not one prospector in fifty in California ever thought of examining a vein for any other mineral than gold, which is almost always found pure and free, and consequently readily known to the most unpracticed explorer. Hundreds of veins, in California, now known to be of the highest value in silver and copper, were, in the early days of our mining experience, passed by as worthless, simply because they did not "show gold" in working quantities.

Very few of our readers are ignorant of the ordinary indications by which the probable presence of quartz veins is noticed, or the manner usually employed in discovering their locality, or tracing their direction whenever found; hence we will not weary their patience by giving details so generally known.

In examining into the phenomena of quartz veins on the Pacific Slope, it should be borne in mind that but a very limited time has elapsed since the first efforts of mining were undertaken here. On the eastern continent and especially in Cornwall and Wales, mines have been wrought from time immemorial, and yet scarcely a year passes without

adding some new fact to the great mass of information already stored up by the generations who have lived and died in studying the theory of these mines, the details of their structure, the relation of those veins to the various ores which they contain, and to the enclosing rocks, etc., etc.

Many of our citizens complain of the apparent dilatoriness of our State Geological Survey, from the fact that our miners are not already put in possession of facts for which English miners have patiently waited whole decades, and for which the English Government has paid an hundred fold more, than our Commission has yet asked for. Such persons cannot be aware of the difficulties and labors attendant upon the solution of the various problems presented in the investigation of so complex a subject as the study of such a wide and varied mining field as is found near and within the boundaries of the State of California.

## THE GEOLOGY OF COPPER.

The recent discovery of numerous and valuable veins of copper, throughout, pretty much the entire length of the state, and the consequent especial degree of attention which is now being drawn to this new interest, has induced us to vary, to a certain extent, what would otherwise have been a natural procession of subjects, in such a series of chapters as we have commenced. And in accordance with numerous requests to that end, we shall "interpolate" whatever number of chapters, may be required to place before our readers all attainable information on the subject of copper, which can be of any practical value to prospectors after, or workers in that mineral. In doing this we shall have occasion to repeat, to a certain extent, the material points of some paragraphs which have already appeared in previous numbers of the *PRESS*.

In referring to the geological conditions under which copper is found, we shall commence with Cornwall, a district which furnishes nearly one half of all the tin and copper produced on the globe. The rock in which the copper bearing ores of this region are found is principally clay slate, or *killas*, as it is there termed. The country, however is much broken up and diversified by obtrusive granites and elvans, which have been protruded through slates by igneous agencies from below. The general direction of the copper veins is east and west, and nearly at right angles with the tin lodes. The ores of copper and tin are seldom found in the same vein in Cornwall, and neither metal is often found in very great abundance at a less depth than 80 or 100 feet below the surface. Some copper veins in this district have been traced several miles—in one instance seven, without any evidence of discontinuance even at that point. No person has ever yet seen the bottom of a vein of either tin or copper. The ores found there are usually the yellow sulphuret of copper and iron, with which are associated at times, black, and gray sulphuret, red oxide, and native copper. The general average of these veins is about 2½ per cent., but which by dressing is actually brought to about eight per cent. before smelting.

**A NOVEL LETTER CARRIER.**—A curious project has been set on foot for the speedy conveyance of letters between England and France. It is proposed to erect in both countries, at a distance of about 10,000 metres from the coasts of Calais and Dover, a strong edifice of masonry, containing a steam engine of sufficient power, by means of which an immense wheel, 25 metres in diameter, is made to turn forty times a minute.

By this rotation a series of wires, forming a gigantic strap extending across the channel, is coiled around the wheel at, one end, say at Dover, and uncoiled at the other, Calais, and conversely. To this strap india-rubber leather bags are to be attached, which are thus conveyed across the channel at 3,000 metres per minute, so that, within the space of twelve minutes the letters and despatches from one country may be landed in the other.

**A Contrast.**—How rich the following paragraph appears, which was originally printed in the *English Quarterly Review*, in March 1825:

"We are not advocates of visionary projects that interfere with useful establishment. We scout the idea of a railroad as impracticable. What can be more palpably absurd and ridiculous than the prospects held out of locomotives traveling twice as fast as stage coaches. We should as soon expect the people of Woolwich to suffer themselves to be fired off upon one of Congreve's ricochet rockets, as to put themselves to the mercy of such a machine, going at such a rate.

## THE MINING STOCK MARKET.

The Stock Market both in San Francisco and Virginia has been unusually depressed during the past week, with restricted operations, even in approved shares. Several causes have led to this depression, neither of which proceed, at all, from any lack of confidence in the mines themselves. Speculative operations have not been noticed, in part, for the reason that no new developments have occurred, on which operations in this line could be based. The unusual excitement with regard to eastern intelligence absorbed much attention that would otherwise have been expended in "feet" speculations; but probably the chief cause of the depression of the week may be attributed to the unusual stringency of the money market, which has operated, in some instances, so as to seriously interfere with time operators in meeting their engagements. The demand for money for stock operations has been exceedingly urgent, as high as 4 and 5 per cent having been offered on securities of substantial market value.

The present check upon operations in the mining market, is an encouraging indication, rather than otherwise, since it cannot fail to exert a healthy influence upon the legitimate business of mining, by reason of the effect it will have to discourage speculative actions, and so to some extent, encourage a more rational investment of capital, where it will increase material values. The flow of capital into the interior as material aid for the development of the mines, is daily increasing, and to its tendency in that direction, may be attributed, in no small degree, its lack for speculative operations upon Montgomery Street. The signs of the times indicate a growing conviction, that the business of swapping jackets is pretty much "played out," and that the folly of speculation is fast passing away and giving place to the more legitimate idea of a permanent development of the mines. The conclusion is now pretty much universal that the mines are not only rich but permanent, and that a sufficiency of the precious metals may be obtained therefrom by ordinary expenditure and industry, to satisfy any reasonable desires of gain; and that the most rational way of acquiring a fortune is to be content with ordinary risks and reasonable time, rather than to take the chances of precarious speculation, with the hope of winning a competency in a day or week.

We hear very favorable accounts from the mines of this region. A large amount of machinery will soon be put in operation there. A party of capitalists in this city who have recently sent agents into that region have become so well convinced of its mineral value that they are about to commence operations on a liberal scale, and have already sent down a party of working men, with machinery, etc., from which we confidently predict early and satisfactory results. That much gold exists in that section may be surmised from the following transaction which occurred there in the winter of '60 and '61.

A large amount of snow had fallen and a most severe winter was evidently upon them, with a pretty fair prospect of a cessation of mining operations until spring. But with the knowledge that the gold was there, it was resolved that Yankee ingenuity and energy could gather it up in spite of wind or weather. The miners went to work and constructed large sheet-iron tanks, filled them with snow then melted it and with the small quantity of water thus produced, added to the small natural flows, in some instances washed out as high as \$16 per day! Thus the element which is generally considered as a pretty effectual extinguisher of placer mining operations was made to furnish in greater abundance the very facilities needed for gold working! The gold of this region is of a very superior fineness—assaying as high as \$19 per ounce. We trust the expectations of even the most sanguine, with regard to this region may be fully realized.

**INCOMBUSTIBLE DRESSES.**—In the London Polytechnic Institution, Professor Pepper has lately exhibited in a most original and practical manner the relative combustibility of muslin dresses prepared with certain chemicals and dresses not so prepared. He brought forward a lay-figure, attired like a lady largely be-crippled. A light applied to the skirt of the dress soon caused the figure to be lost in a pyramid of flame, and some of the more susceptible of the spectators shrieked aloud at the frightful representation of a too frequent reality. For the second effect a real lady, attired in garments rendered incombustible by prepared starch, walked up and down between two troughs in which naphtha, furiously flaming played upon her skirt unscathed. The starch with which the incombustible dress was prepared contained about ten per cent of tungstate of soda and the phosphate of ammonia.



Mining of a substantial character is being prosecuted with vigor and there is now more work being done upon the various lodes in this District than at any period since the discovery of the mines.



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value	shrs per foot.	as to date	Name of Company	Locality of Mine	Name of Secretary	Locality of Office	Capital Stock.	Par Value	shrs per foot.	as to date
RUTH WINDSOR TUN CO	Esmeralda District	T. L. Bibbins	305 Montgomery st	\$100,000	\$100	1	\$	MORAY, G. S. & Copper	La Paz, Colorado	G. J. Turner	606 Montgomery st	\$50,000	\$50	2	
ANTHONY SPER, G. & S.	Esmeralda District	T. L. Bibbins	305 Montgomery st	400,000	500	1	6	BLU RUDER MINING CO	State Range	G. J. Turner	606 Montgomery st	250,000	250	3	8
JEFFERSON	Gold Flat Nev Co	T. L. Bibbins	305 Montgomery st	60,000	100	1	200	MADISON STATE RANGES	State Range	G. J. Turner	606 Montgomery st	250,000	250	3	8
COOK	Esmeralda District	T. L. Bibbins	305 Montgomery st	60,000	100	1	400	SAN FRANCISCO SLATE RANGES	State Range	G. J. Turner	606 Montgomery st	250,000	250	3	8
CORNER	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	600	CAYUGA MINING CO	State Range	G. J. Turner	606 Montgomery st	195,000	100	2	21
SOTOGAME	Esmeralda District	T. L. Bibbins	305 Montgomery st	140,000	100	1	1,350	THURGOOD	Virginia District	N. Shiverick	Mer. st. Mtg Bk	600,000	500	1	
SNYCEA	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1		COLE	Virginia District	W. E. Wood	123 California st	1,500,000	500	1	15
RED WHITE & BLUE G & S	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	360	HAWLEY	Devil's Gate Dist.	C. Stevens	6 Parrots Building	880,000	400	1	2
LILLY OF THE WEST G & S	Esmeralda District	T. L. Bibbins	305 Montgomery st	140,000	100	1		PEYTONA	Virginia Dist	C. Stevens	6 Parrots Building	100,000	100	1	
ESTER	Esmeralda District	T. L. Bibbins	305 Montgomery st	120,000	100	1	1000	CLARK CHERRY	G & S	C. Stevens	6 Parrots Building	1,100,000	100	1	
BULLION	Esmeralda District	T. L. Bibbins	305 Montgomery st	950,000	100	1		MADISON	Sonora, Mexico	H. Waterman	618 Merchant st	240,000	100	1	
LAUREL HILL MINING CO	Esmeralda District	C. S. Higgins	410 Montgomery st	300,000	100	1	200	OSKIDA	Esmeralda District	E. Daniels	Cashier Custom H	600,000	500	1	
UNION	Russ District	C. S. Higgins	410 Montgomery st	1,620,000	100	1	6,275	RHOADS DIGGINGS Q M Co	Sacramento County	Gre. Touchard	414 Montgomery st	870,000	400	1	2
COMBINATION	Telescope District	C. S. Higgins	410 Montgomery st	900,000	50	2	1,700	SAM WRIGHT	Aurora, Mono Co.	E. Worth	547 Washington st	700,000	500	1	
BULLION	Russ District	C. S. Higgins	410 Montgomery st	400,000	50	2	23,000	ST. CLARK	Aurora, Mono Co.	E. Worth	547 Washington st	120,000	200	1	
WHITE & MURPHY, G & S	Virginia District	J. P. Nourse	Lucas & Turners bldg	120,000	500	2	68,000	FEDERAL UNION	Aurora, Mono Co.	J. F. Bailey	605 Sacramento st	800,000	500	1	
MINA PRIETA	Sonora, Mexico	J. P. Nourse	Lucas & Turners bldg	2,200,000	100	1	45,000	JOSEPHINE	Cosco District	W. W. Lawton	400 Montgomery st	1,200,000	250	1	1
DUNNING MOSCOW	Virginia District	F. S. Carter	418 Sansome st	280,000	100	1		BREWELL	G & S	Samuel Marx	610 Washington st	1,200,000	200	1	1
BUCKWY	Virginia District	R. L. Taylor	612 Washington st	160,000	100	1	3,200	NEVADA COPPER MFG. CO	Grass Val. Nev Co	John Armstrong	600 merchant st	240,000	100	2	1
AMERICAN	Esmeralda District	A. H. Clark	522 Montgomery st	1,500,000	500	1	1,050	CINCO SEÑORES	G & S	John Armstrong	610 merchant st	600,000	200	2	1
FRANCES	Esmeralda District	A. H. Clark	522 Montgomery st	1,500,000	500	1	1,050	CLARK HAYES	Esmeralda District	J. H. Blood	7 Montgomery Bk	60,000	50	1	
SLATE RANGE	Esmeralda District	A. H. Clark	522 Montgomery st	315,000	150	1	315	TERREBESSE	Esmeralda District	J. H. Blood	7 Montgomery Bk	60,000	50	1	
ROCHESTER	Esmeralda District	A. H. Clark	522 Montgomery st	815,000	150	1		SM PATCH	G & S	J. H. Blood	7 Montgomery Bk	100,000	100	1	
PALEOPHORIA	Esmeralda District	A. H. Clark	522 Montgomery st	315,000	150	1		FULTON	G & S	J. H. Blood	7 Montgomery Bk	100,000	100	1	
NEW YORK	Esmeralda District	A. H. Clark	522 Montgomery st	315,000	150	1		KNIGHT	Esmeralda District	J. H. Blood	7 Montgomery Bk	100,000	100	1	
CATACLAGUS	Esmeralda District	A. H. Clark	522 Montgomery st	315,000	150	1	7,500	LAURENCE MINING CO	Gold Hill District	P. B. Foxon	Sansome street	24,000	100	1	
ALBANY	Esmeralda District	A. H. Clark	522 Montgomery st	315,000	150	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
LADY BRYAN	Flowers District	J. F. Bailey	605 Sacramento st	600,000	100	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
DESSERT M. CO.	Flowers District	David Wilder	522 Montgomery st	440,000	150	1	6,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ADRIANO	Flowers District	S. R. Rooney	7 & 8 Gov't House	270,000	100	1	600	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
EYERST	Humboldt, N. Ter.	J. H. Gager	Merch st, mnt blk	120,000	100	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
NORTH STAR	Humboldt, N. Ter.	J. H. Gager	Merch st, mnt blk	440,000	100	1	60	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CHRYSTOPHER	Humboldt, N. Ter.	J. H. Gager	Merch st, mnt blk	440,000	100	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ESTER DEL MONTE	Humboldt dis. n.t.	J. H. Gager	Merch st, mnt blk	300,000	300	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
MARIATTA	Humboldt dis. n.t.	J. H. Gager	Merch st, mnt blk	180,000	100	1	1,380	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
LIVE OAK COPPER	Gopher, Calav Co	J. H. Gager	Merch st, mnt blk	252,000	210	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
SIGEL	Humboldt, N. Ter.	J. H. Gager	Merch st, mnt blk	600,000	500	1	67	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
OCCIDENTAL	Esmeralda District	J. H. Gager	Merch st, mnt blk	245,000	100	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ANNIE LAURA	Humboldt District	J. H. Gager	Merch st, mnt blk	600,000	500	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
STARLIGHT	Humboldt District	J. H. Gager	Merch st, mnt blk	670,000	100	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ERVA	Esmeralda District	J. H. Gager	Merch st, mnt blk	670,000	100	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ALBANY	Esmeralda District	J. H. Gager	Merch st, mnt blk	670,000	100	1		ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
WIDE WEST MINING CO	Esmeralda District	S. Patten	522 Montgomery st	1,300,000	500	1	14,200	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
REAL DEL MONTE, CONS.	Esmeralda District	S. Patten	522 Montgomery st	1,700,000	400	1	6,400	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ESMERALDA MINING CO	Esmeralda District	S. Patten	522 Montgomery st	1,600,000	500	1	13,200	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ESMERALDA, N. EXTENS	Esmeralda District	S. Patten	522 Montgomery st	900,000	100	1	6,750	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
SILVER HILL, CONSOLID	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ANTHONY	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
LOCHIA	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ROGERS	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ALAMO	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
BELLA VISTA	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
BURNSIDE	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
BAHNER	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
IOWA	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
LABRONE TUN & CO	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
NORTON	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
REESE RIVER	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
SAD MARIAL	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
SAVAGE MINING CO.	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CALIFORNIA	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CENTRAL	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CECILIA HILL M. & T. CO	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CHOLLA	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CHRYSTOPHER	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CROWD POINT	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CHARLES CALEY	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CORONADO	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
EMMETT	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
DOYLE	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
ELIAS	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
KOHLER	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
LIVINGSTON	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
VIBRARD	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
LAS CRUCITAS MINING CO	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
DAIR	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
LILLY DALE	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
MAMMOTH, No. 1	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
CHOUT HOR	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
SOLIDAD	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
COPPER HILL	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
MADISON	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
SOUTH UTAH	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	
NEVADA MINING CO	Esmeralda District	S. Patten	522 Montgomery st	1,500,000	500	1	27,000	ALBANY	Esmeralda District	P. B. Foxon	Sansome street	24,000	100	1	







## SPECIAL NOTICES.

**Office of the Table Mountain Copper Co.**  
An assessment of Twenty-five cents per share was this day levied upon the capital stock of this Company, payable immediately, in gold coin of the United States, to the Secretary, at the office of the company, No. 628, Montgomery street.

M. G. ELMORE, Secretary.  
San Francisco, May 18, 1863.

**The Annual Meeting of the Stockholders** of the Table Mountain Copper Company will be held at the Office of the company, No. 328 Montgomery street on the second Monday in June next, at 7 P. M.

M. G. ELMORE, Secretary,  
San Francisco, May 18, 1863.

**Office of the Nevada Copper Mining Co.**  
March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees,  
J. ARMSTRONG, Secretary.

**Office of the Tennessee Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees held April 22, 1863, an Assessment of One Dollar and Fifty cents per share upon the capital stock of said Company was levied, payable on or before Saturday, the 23d day of May, 1863.

J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863.

**Office of the San Francisco Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees, held April 20, an Assessment of One Dollar (\$1) per share on the capital stock of this Company was levied, payable on or before Thursday, May 21, 1863.

J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863.

**Office of the Sam Patch Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees held March 30, 1863, an Assessment of Fifty Cents, (50 cts.) per share on the capital stock of said Company was levied, payable on or before Thursday, April 30, 1863.

J. H. BLOOD, Secretary.

**Schmeltzer Gold and Silver Mining Company.**—At a meeting of the Board of Trustees of this Company, held April 11, 1863, an assessment of 26 cents per share was levied, payable in United States coin, to the Secretary, at the office of the company, No. 500 Montgomery street, on or before FRIDAY, April 17, 1863.

M. G. ELMORE, Secretary.

## To Mine Owners.

**PARTIES having a Good silver Mine** and wishing for Machinery to work it for an interest in the Mine Will do well to apply at this office. No organized company need apply.

## T. C. Sanborn &amp; Co.

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**  
**GOULD & CURRY MINING STOCK,**  
**CHOLLAR MINING STOCK,**  
**CALIFORNIA STEAM NAVIGATION CO'S STOCK,**  
**BOUGHT & SOLD.**

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* These Pans have been in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

ZENAS WHEELER.

## A. C. MORSE,

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS** with MINER S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

## Pacific Mail Steamship Company.

## NOTICE.

**ARRANGEMENTS HAVE BEEN MADE** by which shipments of

## Gold, Silver and Copper Ores

can be forwarded under through Bills of Lading from San Francisco to England, at reasonable rates. For further particulars apply to

A. B. FORBES, Agent,

28-4f Corner Sacramento and Leidesdorff streets.

## P. M. STEAMSHIP COMPANY.

## NOTICE.

**Until further notice, the Steamers of** Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above date fall on Sunday, the steamer will be dispatched on the following Monday.

A. B. FORBES, Agent.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,**

**CARPETS, DUCK, ETC.,**

**Cor. Front and Sacramento streets,**

**SAN FRANCISCO.**

## NATHANIEL GRAY,

**General Furnishing Undertaker,**

**641 Sacramento st., Cor. of Webb,**  
**SAN FRANCISCO.**

## Percy Douglas,

IMPORTER OF

**CROCKERY,**

**FRENCH CHINA,**

**Glass Ware, Etc., Etc.**

**No. 421, MONTGOMERY STREET.**

**SAN FRANCISCO.**

## DONAHUE'S

**Union Iron and Brass Foundry,**

**CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.**

**The First Established in the State.**

**MANUFACTURE STEAM ENGINES,**  
**SAW AND GRIST MILL MACHINERY, Boilers,**  
**Quartz Stampers, Amalgamators, etc., at reduced prices.** Have now the largest and best assortment of Gear and Machinery Patterns in the State, a list of which will be forwarded to anyone desiring it, free of cost.

PETER DONAHUE

## New Patent Agency.

**WE HAVE CONNECTED WITH THE** Publication of the "Mining and Scientific Press"

## The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

## Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco.

EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building. EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate.

EWER & SMITH.

## PATENT RIGHTS.

**Patent Rights Bought and Sold,**

At the office of the "Mining and Scientific Press" Agency.

EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors.

EWER & SMITH.

## P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of May, 1863.

May 13th, - - - - - Steamer Orizaba

May 23d, - - - - - Steamer Golden Age.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York

For Freight or passage, apply to  
A. B. FORBES, Agent.  
je4 Corner of Sacramento and Leidesdorff sts.

## Miners' Foundry

—AND—

## MACHINE WORKS,

**First St., between Howard & Folsom,**

**SAN FRANCISCO.**

**EVERY DESCRIPTION OF IRON AND BRASS MACHINERY,** the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING.

San Francisco, February 23, 1863.

## PALMER, HANSCOM &amp; CO.,

## GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

**GENUINE WHITE IRON SHOES AND DIES.**

PALMER, HANSCOMB & CO.

## To Quartz Miners.

**Knorr's Improved**

**AMALGAMATING PAN,**

WITH

**PALMER'S PATENT STEAM CHEST**

**THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals any process now known.**

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to catching - floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOMB & CO.,

GOLDEN STATE IRON WORKS,

Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubes, and are cautioned against making, buying, using or selling the same without his consent.

W. A. PALMER.

## VULCAN IRON WORKS CO.

P. TORQUET.....MANAGER

R. IVERS. C. R. STEIGER. S. AITKEN.

## Steam Engine Builders,

**Boiler Makers, Iron Founders and General Engineers,**

Nos. 137 & 139 FIRST STREET, - - - - - SAN FRANCISCO

STEAMBOAT MACHINERY built and repaired; also Flour and Quartz Mills, Pumping and Mining Machinery etc., etc., etc.

Proprietors of Morse's Patent Fire Grates. JOYFUL, FOURKNOTS and other Turbine Water Wheels with latest improvements.

## DEETKEN'S

## Chemical and Metallurgical Works

**On San Bruno Road, Islais Creek,**  
**SAN FRANCISCO.**

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 20 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired mill owners. No power nor clean water required for the purpose.

nov8-3m

## LEWIS COFFEY AND RISDON,

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repair of Old Work, executed as ordered, and warranted to quality.

Old Stand, corner Bush and Market Street Opposite Oriental Hotel, San Francisco, Cal.  
LEWIS COFFEY J. N. RISDON.

## JAMES PHELAN,

(LATE J. & M. PHELAN.)

IMPORTER AND JOBBER,

## Wines, Liquors, Etc., Etc.

Nos. 616 & 618 Front street,

Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO

All Goods Guaranteed. Orders Solicited  
TERMS LIBERAL. Jan. 1-1f.

## THEODOR KALLENBERG

## Maker of Models

FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments.** Scales, Weights, etc.; Stamp, Dies and Die Sinking, Embossing-Stamp. Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market, (n7.3m) San Francisco.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, MAY 25, 1863.

NO. 30.

## SPECIAL NOTICE.

We wish it distinctly understood that all the interest which Julius Silversmith ever had in the MINING AND SCIENTIFIC PRESS, ceased in November of 1862. EWER & SMITH are now the publishers and proprietors.

## THE COPPER MINES OF CALAVERAS COUNTY—INTERESTING LETTER.

COPPEROPOLIS, CAL., MAY 20, 1863.

MR. EDITOR:—I propose giving a few items from the Copper Mines of Calaveras County, which may interest those of your readers who have faith in this class of mines being made productive in California. There are many Californians who think that mines of copper can possess no value unless the ores are found in *concentrated lodes*. If the people of this State would only devote a little time to reading the report of the English copper mines, they would soon find out that concentrated lodes of copper ore are very rarely found, and that copper lodes do not produce one third copper ore.

The principal copper mines that I have visited in this county are the Union, Keystone and Calaveras at Copperopolis, and the Napoleon of the Gopher district. Not yet having had time to visit other mines in those localities, I cannot speak of their real worth, but report says there are quite a number of good prospects in the vicinity of the mines mentioned above.

### THE UNION MINE.

This mine is not surpassed in richness by any other copper mine in the world, as far as developed. The Company have developed their mine about 600 feet in length, and have three working shafts, 180 feet deep, and an engine upon each one. The lode varies in thickness, as all lodes do, from one to twelve feet, and will produce about 10 tons of 20 per cent. ores to the fathom (6 feet square). Two thousand tons of this class of ores could be easily taken from the mines monthly, by 100 miners; and this independent of a large quantity of 6 per cent. ores, which are mixed with slate, mudic and sulphurets of iron. These poorer ores can easily be concentrated up to 18 and 20 per cent. ores, the sale of which ought to pay all the working expenses of the mine. This company have now on the surface 5,000 tons of 7 per cent. ore, ready for concentrating, and have not yet *stopped* a foot of ground. The galleries from which this mass of mineral has been taken comprise a near extent of 600 feet. Persons acquainted with mining operations can readily calculate the number of tons of ore thus discovered and proved. I believe 300 tons of ore is about the amount of their present monthly shipments, which is less than their waste ores could be made to produce.

### THE KEYSTONE MINE.

This mine joins the Union on the East. The Company have a very fine lode, which can be easily traced the whole length of their claim.—3300 feet. They have two working shafts; one 260 feet deep and the other 140, located upon

each end of the mine. The lode in these shafts looks well. At the depth of 260 feet they have a fine lode of concentrated ores, six feet thick, which will assay about 20 per cent. as it comes from the mine. The work that has been done upon this mine, like that upon all others in this locality, has cost double what it ought to have been done for, in consequence of the employment of inexperienced superintendents; consequently the company has not yet paid any dividend. The mine has been worked entirely for lodes of concentrated ores, such as the Union mine produces. Such deposits are few and far between in this, as well as in most other mines the world over.

The expense of running drifts and sinking shafts to find deposits of concentrated ores has kept this company back from ranking with first class copper mines. The company has recently, however, made arrangements with a practical copper miner to take charge of their mine and erect "Concentrating Works." This party has had 30 years experience, as Superintendent of copper mines, and a concentrator of copper ore. We are quite confident that this mine, inside of four months, will be shipping from 400 to 500 tons of 20 per cent. ore per month. The new Superintendent will send to the surface the entire bulk of the lode, as it runs, and select the No. 1. Numbers 2 and 3 will go to the concentrating works and subsequently be returned as No. 1 ore. Thus every particle of copper ore will be saved and prepared for the market. Such a method of working will soon make the Keystone equal to the Ophir, of Washoe, in its yield of wealth.

Parties are now in your city negotiating for machinery, by which to concentrate ores and this Company will no doubt have in operation the first copper concentrating works on this coast. The mill will be in operation, probably, within four months.

### THE CALAVERAS COMPANY.

The mine of this Company—the 2nd western extension of the Union—has not yet been opened to any great depth. This Company has done most of its work upon the cropings of the lode; they find a superior quality of mineral, such as the black, gray and "horse flesh" ore—the latter a local term for the red oxide of copper. These ores are chiefly found on the back of the lode, never in large quantities, and not often deep down. They are good indications in a mine. The Company is shipping some ore, but not enough as yet, to pay expenses; neither will they do so for some time to come, unless they change their present mode of working.

### THE NAPOLEON MINE.

This mine has never been properly worked until quite recently. Until within a few weeks all the work has been done upon stringers and feeders, the main lode not having been struck until since the present Superintendent has had charge of the mine. Since the change in its management, the working plan has been so modified as to make it essentially a new mine. The main shaft is now 140 feet deep. The main lode or rather its *foot wall*, was struck in this shaft by the former Superintendent, but he was not aware of it, but passed on by it, timbering as he went down, and

commenced work upon some feeders, which were lying under the main lode. When the new Superintendent took charge, he ran a cross drift from the bottom of the shaft to strike the lode which his predecessor had neglected, and was rewarded by finding a well developed vein six feet thick, and of undoubted richness. A drift has now been run 78 feet upon this lode, and shipments of 20 per cent. copper are now being regularly forwarded to your city for transfer East. The Company has a large quantity of 5 and 8 per cent. ore on the surface, which will soon be concentrated. The Superintendent of this mine, who also has charge of the Keystone, informed me that he should be able to ship from 100 to 150 tons of ore per month, as soon as he had his drifts properly opened and in good order for working, which would be in a few months.

### CONCLUSION.

From the above notes, which have been hastily thrown together, your readers may be able to form a pretty correct judgment of the value of our copper mines in this section. Persons interested, and especially those working and superintending copper mines should bear in mind that it is not necessary that they should have lodes of concentrated, 20 per cent. ore, to make their mines pay. Give me a lode four feet thick, with the mass of vein stone averaging 6 per cent. of copper—I care not how much scattered it is throughout that mass—and I will guarantee to you dividends equal to the best paying silver mines in Washoe.

### COPPER MINER.

LABORERS WANTED.—From every part of the mining regions we hear complaints with regard to the lack of laboring hands. The unusual exodus of miners over the mountains, and the increasing interest which is being taken in copper mining on this side, appears to have completely absorbed the surplus labor—or at least all that is skilled in underground work. Wages, we understand, have materially advanced in many places, and it is found necessary to offer additional inducements, to keep men at steady employment, in preference to joining in the general rush for "prospecting" on their own account. In Del Norte county, we understand some of the mines are at a stand still for the lack of hands to work them. There is great complaint also of the scarcity of laborers in the Copper Mines of Contra Costa county, while gentlemen recently from the central and lower portions of Nevada county inform us that mining employers there have been compelled to make material advances in the wages of their hands to keep them from joining in the general rush for "new diggings." We hear similar reports from other sections. The present promises to be one of the most successful mining seasons on record. Large shipments of copper ore will soon begin to arrive in this city, and we are greatly deceived in present indications if this new branch of business, does not reach an important position in California industry, ere the present year is passed. There are hundreds of idle men about this city complaining that they have nothing to do, who might find good employment, at this time, in the mountains, and be of service both to themselves and the State in opening up the new avenues of wealth the existence of which their more enterprising neighbors have brought to their notice.



## OUR MECHANICAL INDUSTRY.

## Miners' Foundry and Machine Works

We visited this establishment a few days since and took a hasty survey of the premises. The increasing importance of the mechanical interests of this city may be very correctly estimated by the extensions of the working area of our various foundries and machine shops, and the evidences of this kind which we met at the MINERS' FOUNDRY, testify that this establishment is enjoying its full share of this increase. Large additions have been made to every portion of their working room and everything about the establishment has the appearance of order, convenience and thrift.

In addition to the usual mechanical appliances this foundry has been converted into a perfect Miners' Museum. Here may be seen almost every description of machinery employed for mining purposes not only in the various stages of manufacture and in completeness, but also in actual practical operation. We saw at work Wheeler's Amalgamator and Separator, Howland's New Freyberg Process (a new and valuable invention which we shall notice more fully next week.) West's Amalgamating Pan, Celeman's Pan, and four or five different Crushing and Grinding Machines, for working quartz, Mineral Paints, etc.

Fully alive to the great importance of the Mining interest the Proprietors of this Foundry have set apart commodious rooms for the especial use, and provided ample motive power for the working of their machinery, both to enable the inventors to exhibit practical tests of their several inventions and improvements, and also to afford miners and mine investors every convenience for testing their ores upon a practical scale here in the city.

Upward of 100 hands are employed in this Establishment. It has two furnaces capable of melting seven and a half tons of iron each. Single castings have been turned out at this Foundry, weighing six and a half tons. They are now constructing for the Real del Monte Company, at Aurora, a beam Engine of 100 horse-power. This Foundry also has the contract for the entire construction of the Mill for this Company. We examined the plan and drawings of the same which is to cost about \$100,000, and which will be one of the finest works of the kind on the Pacific Coast. The Mill will be 160 feet long by 60 wide, with a brick smoke stack 70 feet high.

This Foundry has also recently constructed and put in operation the Wide West Co's new Mill. They have also lately shipped the machinery for S. C. Fogus & Co's Mill, which is now in progress of construction, as a custom mill at Aurora. This is a 12-stamp steam mill, and will use 8 Wheeler Pans and 3 Separators.

They are also at work upon a mammoth amalgamating pan of West's Patent, which is 24 feet in diameter.

We have received a copy of the annual circular of this firm, containing their advertisement, illustrations of various machinery manufactured at their establishment, and a large number of valuable mechanical tables, rules for mensuration, etc.

We shall endeavor to look in upon some other establishments and take a few notes in season for our next issue.

## Copper Ore—The California Smelting Works.

The Secretary of the California Smelting Works, gives the following schedule of prices which the Company will pay for copper ores delivered at their wharf at Antioch:—

7½ to 8 per cent.....	\$15 per ton of 2,376½ lbs.
9 per cent.....	17 " "
10 per cent.....	19 " "
11 per cent.....	21 " "
12 per cent.....	25 " "

and in the same ratio for ores of higher assay. The ore is estimated by the usual smelting ton of 2,376½ lbs. dry weight

When desired the Company will advance all expenses of freight and transportation from the Mine to the Works. The ore may be sent in bulk or in bags, which will be returned. Payment will be made in gold as soon as the value of the ores is ascertained by the assay of the Metallurgical Chemist of the Company.

An architect proposes to build a Bachelors' Hall, which will differ from most houses, in having no eaves.

## Notes of a Trip to Slate Range via Los Angeles, Tehacapa, and El Paso.

[We give below the first of a series of letters which will be furnished by an intelligent correspondent, who left this city some two months since, for an exploring expedition through the Slate Range Mining District. The notes of travel, given in the present letter, will be interesting to parties who may think of visiting that region, and the subsequent letters, descriptive of the mines, etc., will, no doubt, be found truthful and valuable.]

## THE DEPARTURE.

SATURDAY, MARCH 28, 1863. Having bid farewell to our wives, children, sweethearts, and friends in Alameda and Oakland, our party, consisting of two strong limbed and strong hearted young men and myself, crossed over to the city, made up our final purchases of such articles as we supposed the trip required, limited to some extent by the scarcity of coin, sent them on board the steamer, spent the evening with some friends, took our last sleep in San Francisco, for one or two years to come, perhaps, and on Sunday morning at 9 o'clock stepped on board the fine steamer Pacific which took the place of the disabled Senator, and in fifteen minutes her loud mouthed bull dog belched forth his parting compliments to the just awakened denizens of the Golden City, and we were fairly started on our long journey to the far distant silver mountains of San Bernardino county.

## THE TRIP DOWN THE COAST.

But few incidents occurred upon our trip down the coast. The weather was very fine, but after passing the Gate the steady regular swell of old Ocean's bosom, caused a curious sensation about the gastric region, which prevented us from appropriating our rations for the balance of the day and even made a demand upon us for our breakfast. Determined to become acquainted with coarse fare and limited accommodations as soon as convenient, at night we took our blankets and made our way to the sleeping apartments devoted to the forward passengers. These we found commodious, each with a good clean mattress, and the only drawback was the fixidness of the bull eyes which should have afforded us some ventilation. On appealing to the steward, he informed us that the orders were peremptory in regard to that matter, and I suspect they were given while the steamer was engaged in a higher latitude and had not been revoked.

On the following morning, our appetite having returned, we obeyed the call to breakfast, but were somewhat checked on finding the table nearly surrounded with Chinamen, outnumbering the white folks considerably. Some of our party gave unmistakable evidence of their disgust at this arrangement, in plain English, but the writer said nothing, as the Johns were as cleanly in their dress and manners as any at the table, and determined to put up with anything within human endurance, rather than find fault. But the fare was really execrable and by those present who had traveled on the Senator, was said to be very far inferior to hers. We made out to reduce a little of the very tough fried beef, hard bread and molasses, and sweetened coffee, and then resorted to our own grub box for a nice soda biscuit and a ginger snap to finish our meal, with a cup of good water of which there was plenty on board.

Late in the evening of the second day out, as we were promenading the upper deck, a young man approached us with a book in his hand, accompanied by another holding a lantern, and asked for our fare (\$15) which we paid; but some poor fellows who were dozing in some of the obscure corners of the vessel, missed, I am quite positive, the kind attentions of these gentlemen. Good enough for them. They should be around on such an important occasion. One of our passengers who had been in Uncle Sam's employment as a teamster, was there, on his way to join a portion of the Army on Owens' River, if I remember rightly, had only green backs on hand. He offered three fives for his fare, but they would not take less than four. He refused to give more than three, and was told they must take his sack of clothing. "All right," said he, "and perhaps you had better take my blankets also." "Yes, we will." Said he, "I can get them again when we arrive at San Pedro." Poor fellow! He did not succeed; but waited till the steamer returned from San Diego, then went on board, paid his full fair in coin and took his baggage. He found it too

big a job to resort to law, against the Company, though he might eventually succeed, perhaps.

TUESDAY, 31st. Arrived at anchorage in the Bay of San Pedro, at 4 A. M., at a little outside Deadman's Island, and soon found ourselves surrounded with yaws and barges to convey passengers and freight to Tomlinson's Landing, (Old Town, and a pretty little steamer belonging to Col. Banning, to take those who preferred to New San Pedro.

## ON SHORE—OLD AND NEW SAN PEDRO.

We being acquainted with Mr. Tomlinson's reputation for urbanity and kindness to strangers, took passage in his boat and found all we had heard verified. We stayed with him till next morning, enjoying the leisure hours in helping him and his men to unload and stow away freight, and between the trips he would recount some of his adventures with Indians and bears while teaming in different parts of this State, Oregon and Mexico. He, I think, is the bell teamster of California, having for many years, the greatest amount of stock on the road. His horses and mules are continually running on the roads with freight from his warehouses in Old Town and Los Angeles to the Colorado, Slate Range, El Paso, Owen's River, Coso, Anrora and everywhere else, with machinery and the necessities of life for those who toil among the unlimited mining districts of our State and Nevada.

Old San Pedro is a small village consisting of Mr. T's warehouse, his boarding-house and a grocery kept by a German, close by.

New San Pedro appears to be a very pretty village, pleasantly situated at the head of the Bay, about 2½ miles from Old Town; approachable with boats only at certain stages of the tide. The indomitable energy of Col. Banning and his associates will no doubt continue to make it the town on the Bay.

Camp Denver is located there which adds much to the life of the place.

WEDNESDAY MORNING, APRIL 1st. Packed our freight on mule teams and at 10 A. M. started on foot for Pueblo de Los Angeles (the city of the angels.) On leaving the beach we ascended a high, sharp bluff and at once the eye took in the whole vast plain to the mountains about twenty-five miles distant, with the city at the base and which would be visible from a slight elevation. This plain at this time presents the appearance of a great desert, not a tree or shrub, but occasional patches of a weed which in our younger days we called cheese plant, and which stock do not seem to relish, even when their supply of grass and clover is exhausted thus early in the season. Stock of all kinds is now being driven back to the valleys and gulches in the mountains to avoid starvation. It is expected that the losses will be very great, on account of the small supply of water which fell last winter.

On this dreary walk we came upon a Rodeo in full operation and had a good opportunity for the first time to witness the manipulation of the hombres, on this annual occasion, in lassoing, throwing, branding the young stock and hunting off each man's animals by themselves so that he may take an account of stock, make out his invoice and take his place in the property scale to which he is entitled.

By actual observation we became convinced of the oft repeated assertion that ground squirrels, owls, and snakes live together in harmony. Large squirrels were moving ahead of us in all directions, about twenty yards distant and sometimes 100 would be counted in sight. We saw the owls sitting by the squirrels holes and disappear as we approached and snakes would occasionally follow them and lizards and horned toads (of which we saw some beautiful specimens, all seemed to have their homes with the snakes.

## A WEEK IN LOS ANGELES—THE START FOR THE MINES.

Arrived in Los Angeles in the evening and camped in the spacious storage yards of Tomlinson & Co., occupying fifty vara lot enclosed with an adobe wall seven feet high the front filled with adobe houses and offices, one side arranged with stalls for horses and mules, the other piled with lumber kept for sale, and the centre filled with their great wagons and stages.

We here enjoyed our first experience in sleeping in the open air, and it was not a pleasant sensation, but we soon became accustomed to it as the novelty wore off.

Finding no teams loading for Slate Range, we amused ourselves in looking about town and wandering into the



country among the vineyards for which this place is justly famous. Plenty of orange orchards were to be seen but no fruit. The vineyards presented a very bad appearance, the stem though from ten to twenty years old being only about three feet high, consisting of two or three branches and each branch having only one spur or bud upon it. The leaves were starting out on some of them, but the grass and weeds between the rows had not yet been disturbed and together with the scraggy stumps presented a desolate appearance.

The arrangements for irrigation about the city are very fine, the Los Angeles River being conducted in small channels, so that all can have the use of it by turns, twice during the season I believe being the general rule. The streets of Los Angeles generally present a somewhat lively aspect, particularly around the principal hotel, Belle Union and where the heaviest dealers in merchandise are located. A few fine brick blocks are up and well filled in with goods, and the market house with its fine turret clock and the court house, tend to give it an American appearance; but the many low adobe dwellings, with their heavy walls and no windows or an occasional opening checkered with iron bars, tells plainly that the old Spanish ingredient still occupies a prominent place in society.

I remained in Los Angeles over a week and such a dull week never fell to my lot before. Once the mail arrived from San Francisco and that was a great relief, though it required only a few minutes to appropriate all the Daily Alta served up—which was the only paper I saw. On all occasions in Los Angeles when we replied to the question "What mines are you bound for?" "Slate Range," the enquirer would open his eyes with wonder and exclaim, "I thought Slate Range was 'played out'! Why don't you go to Soledad, Colorado, or El Parso?" But Slate Range was our goal and there we would go.

On Tuesday, 7th, we found an ox team would start for Slate Range the next day, under the charge of McGuffy, and loaded with corn, lumber tools and supplies for the Fernando Mill Company. So we offered our services to Mr. McGuffy, as ox-drivers, or bull punchers, as they usually call themselves. He accepted one at low wages and would take our freight at 8 cents a pound, making no charge for personal baggage and blankets, and we could ride when we chose, on easy grade. So we closed and started out Wednesday morning, April 8th, at 10 o'clock, and walked 6 miles to Mr. Mayhew's ranch where the cattle were to remain over night to fill themselves before commencing the journey over the dreary deserts and mountains before them.

Mr. Mayhew invited us in, and we passed a pleasant hour with him. He is a candid Alabama Southern sympathiser and feels somewhat annoyed at the prospect of being drafted to fight in the northern ranks. Thinks that a regiment such as he would make poor defenders of the North. I agree with him fully. Yours &c. C. W. G.

#### TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metalliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; that rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel,

and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphureted ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector. These articles will be published under the head of "THE MINER'S LABORATORY," and will be found of great value to the mining public. [*Mining and Scientific Press*, April 20.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and *four dollars*, or *two dollars* for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so for meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

## Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - Proprietors

#### Engravings, Electrotyps, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. SKETCHING and ELECTROTYPING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Dies, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

### To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

#### MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

#### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

#### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

#### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

#### To Chemists, Architects, Millwrights and Farmers!

This Journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

#### Terms.

To mail subscribers:—Four Dollars per annum.

#### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2.80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

#### EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

#### Our Mint, its Rules, Charges and Operations.

#### For parting silver from gold when gold

is below 300-1000ths. fine ..... 3cts per oz.  
" from 30-100ths. to 750-1000ths fine. 7 cts " " oz.  
" " 750-1000ths to 950-1000ths " 14 cts " "

#### DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " " " "

#### DEPOSITS FOR FINE BARS

\$1 16-4-11ths. cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

#### BARs SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

#### DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

#### DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.



## THE MINERS' LABORATORY.—NO. IV.

## THE GEOLOGY OF COPPER.

FRANCE affords but one workable mine of Copper. Numerous mines have been wrought at various periods in the past, but, we believe, with the above exception, they have all been abandoned. The copper veins of this country are everywhere found associated with aluminous slates, more or less metamorphic, and among which, at frequent intervals, porphyritic rocks have been protruded. The mines at Chessey are directly at the line of junction of the granite and lias, (the latter a species of limestone.)

GERMANY.—The Copper Mines of the Hartz mountains occur in grauwacke slate into which numerous belts of trappean rocks have been obtruded. The mines of Rheinbreitenbach are in the same character of formation, and are productive in pyritous and variegated copper.

SPAIN.—The general character of the deposits of this metal in Spain, is similar to those of the Hartz mountains.

In the Province of Hueloa is a district of much mineral wealth, the formation of which is clay-slate, traversed by numerous porphyritic eruptions, and it is near the line of contact of the slates and porphyry that nearly all the metaliferous veins occur—the most valuable being directly between the two formations, having a wall of schistose slate on one side and porphyritic granite on the other; the former usually composing the south wall and the latter the north wall of the veins. The veins are often found with both walls of porphyry, and sometimes, though unfrequently, with both of slate.

PRUSSIA.—In the vicinity of Mansfield, in Prussia, an interesting deposit occurs, known as the "Keeperscheifer," or copper slate—a thin layer of which occurs in magnesian lime stone. Throughout the entire body of this "copper slate" is disseminated gray argenteriferous copper ore.

Near Schemnitz, in Hungary, is an interesting metalliferous region, which produces about 5,000 tons of copper annually. The veins of this district are found altogether in porphyritic rocks, connected with sienites and passing into granites. The predominant vein rock is quartz and sulphate of barryta. The ores are pyritous and gray copper.

NORWAY AND SWEDEN.—The veins of these countries are almost exclusively confined to the gneiss and mica slate, more or less metamorphic from subterranean heat. The copper from this region is highly esteemed in consequence of its purity and freedom from arsenic and other metals.

RUSSIA.—The copper deposits of Russia, in the Ural Mountains, are also remarkable for the purity and richness of their ores. The copper ores of this region are found chiefly in thin veins and nests of malachite, which lies in a broken, unconsolidated mass of detritus, overlying the surface of the upturned edges of lime-stone strata, intermixed or rather intercalated with ridges or ledges of trappean rocks. This malachite, though not in immediate contact with trappean rocks doubtless owes its origin, indirectly to igneous action, being probably a secondary product resulting from cupriferous sublimation, accompanied by stalagmite deposition.

CUBA.—The copper deposits of Cuba, like those in the Ural Mountain region, are not in regular veins, but in beds and masses, in immediate connection with igneous rocks, such as greenstone and serpentine. The gangue of these deposits is composed of quartz and common white marble. The ore consists chiefly of yellow sulphurets, although blue carbonate of copper is not uncommon.

CHINA.—The copper mines of this country are very numerous and of great value. They exist chiefly in metamorphic granite, with veinstone of quartz and Jasper.

IN AUSTRALIA the mines of copper are situated in an association of rocks quite similar to those formed in the Cornwall copper districts. The Barroosa district is in mica slate, similar to the Killas (slates) of Cornwall. Through these slates, as in those of Cornwall, granites and sienites have been protruded, at frequent intervals. On the Copper Mine River, the enclosing rock consists of trap and stone, with occasional layers of limestone.

IN LOWER CALIFORNIA and Carmen Islands, we learn from verbal communication that the enclosing country of the copper veins consists almost altogether of igneous rocks.

From the above data it will be seen that copper ores are

found in almost all positions, from the most recent clay slates and detritus to granites, but invariably either in actual contact with or in the immediate vicinity of igneous or metamorphic rocks. Perhaps no metal presents more uniform evidence of an origin derived from an igneous agency than copper in its various ores. Of its origin we shall speak at a future time.

With the exception of iron no metal, used extensively in the arts, is more generally distributed than copper. There is scarcely a known country on the globe where it has not been found in workable quantities.

It is hardly necessary that we should occupy space in a journal for California readers, to direct them how to find or trace a mineral vein; yet a few brief hints to aid the prospector in determining when he has found a copper vein may not be out of place.

## TO TEST COPPER ORES.

Perhaps there is no characteristic of copper veins so general as their color. Whenever a mineral of a green or blue color is met with the presence of copper may be reasonably suspected.

A very simple and ready method to test the presence of copper in any ore is to drop a little nitric acid upon it, and after a short time dip a feather into the acid, and wipe it over the blade of a knife. If there be the least quantity of copper in it, the same will be precipitated on the knife. Perhaps a simpler mode than this cannot be named.

A blow-pipe test may readily be made as follows:—Place a small piece of copper ore, with a little borax on a piece of charcoal, and apply the flame of a blow-pipe, when if any copper is present it will soon show itself in a small globule.

Again take a small quantity of the ore and pulverise it; place the powder in a small vial, add three or four times its bulk of nitric acid, which will soon dissolve the powder; then add a little water, and dip the point of a knife, or any piece of bright iron into the liquid. If copper is present the iron will be found coated with it.

## CHARACTERISTICS OF COPPER ORES.

The ores of copper are quite numerous and present a great diversity of appearance, yet they are all very readily distinguished, each from the other, by certain unmistakable characteristics, which are rendered familiar by a very little attention. The presence of copper in any ore having been determined by the "tests" above given the character of the ore can, in most instances, be determined by the following description:—

The ores of copper are divided, by metallurgists, into 13 different classes, and each class is subdivided into many varieties. The richest of the ordinary ores appear under two general aspects: the first having a metallic lustre of copper red, brass yellow, iron or blackish gray, at times inclined to blue; the second is without metallic appearance, of a reddish color, verging upon purple, blue or green, the last being the most usual tint. The classes of ore most frequently occurring are Native Copper, Sulphuret of Copper, Copper Pyrites, Gray Copper, Sulphate of Copper, Carbonate of Copper and Arseniate of Copper. The most common are sulphurets and oxides, the former being the most abundant.

Sulphuret of Copper occurs in all considerable copper districts, and is very abundant in California. The color of this ore is a blackish lead gray, approaching, at times to tarnished blue or green. It is considered one of the richest ores, and generally occurs in very heavy veins.

Copper Pyrites greatly resembles, in appearance, sulphuret, of iron, common in the gold bearing quartz of this State. The color of the Pyrites is brass yellow, subject to tarnish, with greenish black streak and uneven fracture.

Copper Pyrites are readily distinguished from iron pyrites, which they greatly resemble, by their inferior hardness; they may be cut with a knife, while iron pyrites will strike fire with steel. A marked difference may also be noticed in the effects of nitric acid upon the two substances. They do not form so rich an ore as sulphurets. The richness of the pyrites may generally be judged by their color. If they present a fine yellow hue, and readily yield to the hammer, they may be considered a good ore; but if they are hard and of a pale yellow color, they are mixed with iron pyrites, and consequently comparatively barren of copper and constitute a poor quality of ore.

Carbonate of Copper is of a blue or light green color, with

pale green streak. It often occurs in beautiful green crystals. It is also known as Malachite. Green Malachite or Green Carbonate of Copper admits of a high polish, like marble, and when obtained in large slabs, is often formed into tables, mantle pieces, etc.

Arseniate of copper is of various shades of olive green, and sometimes occurs in beautiful blue crystals. It readily melts between the blow-pipe, throwing off fumes of garlic odor. This ore is but little worked.

Gray Copper ore is of a steel gray color, more or less deep, either bright or dull. The value of this ore is often very materially increased by reason of the silver which it contains.

It is generally accompanied, to a greater or less extent with copper pyrites.

Sulphate of Copper (Blue Vitriol,) is similar to the artificial salt of the laboratory. The water flowing from mines of this ore is of a blue tint, caused by the solution of this salt.

Copper is easily obtained from this water, in a metallic state by depositing pieces of scrap iron in it.

The ores above named are about all the ores of copper which are worked to any extent.

The copper of Lake Superior contains about 3-10ths of one per cent of silver. The copper of this State, mostly if not all, doubtless contains an appreciable quantity of both gold and silver. Of this we shall probably receive more definite knowledge when full returns are received from ores which have been sent East for reduction. A little metallurgical knowledge will be found of vast importance to the miner everywhere, and especially in California, where the mineral deposits assume such unprecedented profusion. Our miners according to present indications, will soon become as familiar with copper ores, as they have, for the last ten years, been with gold.

COPPER MINING.—We would call the especial attention of those of our readers, who are interested in copper mining, to the letter of our Calaveras County correspondent, who writes over the signature of "COPPER MINER." He is a gentleman of much practical experience in working and concentrating copper ores, having been thoroughly schooled, in that business, both in Cornwall and in the Lake Superior copper region. He has taken the liberty to criticise pretty freely upon some of the past working in the mines which he has visited. Of course he is responsible for what he says, and even if he may err in judgment, in some cases, no evil need to come of it. A fair open criticism and description of our mines and mining operations is what we want. It is the only way to obtain practical information, such as will lead to progress and success in mining enterprise. We want information with regard to processes and modes of working, both in the mill and mine. We are promised other letters from our Calaveras correspondent. We trust and believe they will be read with interest and profit. If any parties should think they have been unjustly criticised or spoken of, our columns are open to reply. Discussion is pretty sure to elicit truth and that's what we want. We shall give some valuable and practical information with regard to the mode and processes for concentrating copper ores, as soon as we can secure the necessary data, which will be within two or three weeks.

SPECIMENS FROM HUMBOLDT.—We have examined some specimens, handed in by Mr. Trotter from Union City, from the Cassius Company, Brutus Ledge, which was mentioned by our Humboldt correspondent of last week. The specimens before us were received a few days since and look well for both gold and silver. Assays from this Company's ore range from \$171 to \$1000; taking the lowest and the highest figures, a small percentage of which is gold. The Cassius is an incorporated Company. F. R. Jenkins is Sec. and M. D. Howell, Prest.; Office W. B. Cook & Co's Stationery store Montgomery Street. The Company are now making arrangements for properly opening the ledge, with a view to the commencement of active operations.

MORE DIVIDEND-PAYING COMPANIES.—The Daney Gold Silver Mining Co., Devil's Gate District, N. T., pay a dividend of \$14 a foot to day. The Union Gold Mining Company (Howland Flat, Sierra County, Cal.) announce a dividend of 3 per cent. on their capital stock.

WE notice the removal of our friend A. J. MOULDER, Esq., Stock Broker, to a spacious Office, No. 605 Montgomery St. which place has been nicely fitted up for him, with R. C. PAGE & Co.



	Bid. Asked		Bid. Asked
Alpine	\$4 10	Keeney	—
Ataduro	— 5	Live Yankee	15 —
Atlantic	20 —	Lord Byron	7 12
Arcade	6 10	La Plata	7½ 12
Atletico	—	Mala Esmeralda	45 50
Asturias	45 —	Monroe	—
Bla.	—	Monsieur Tunnel Co.	— 10
Bla.	12 20	Mount Christy	40 —
Bodie Bld Consolidation	— 20	Mutual	— 10
Bodie Peak, Bodie District	— 8	Mount Brady	— 10
Bright Star, Bodie District	10 15	Mina Real	4 6
Bumboo	45 65	Meredith	12 18
Bullion (Van Horn Dist.)	— 10	North Willow Springs	50 75
Bodie Bldg. No. 1	12 18	New Esmeralda Consol.	— 6
Bodie Bldg. No. 2	— 10	Newton	60 —
Bunker Hill	14 15	Nevada, (Tunnel)	— 10
Comparto, Tunnel comp.	— 30	Ozark	— 20
Cactus	— 25	Old Winnemucca	— 5
Climax	— 10	Paul Tunnel Co.	— 5
Rocket	50 60	Pacific	15 —
Cape	— 5	Paid	— 70
Cavis, Consolidation	—	Pride of Angels	10 15
Cargill	— 8	Pera (two ft. to share)	— 10
Celtic	— 8	Pennsylvania Tunnel Co.	— 4
East Essex Ex. Ural	— 12	Real Del Monte	— 100
Excelsior, Excelsior Dist.	3 10	Rebecca	15 —
Empire	— 28	Red, White & Blue	— 20
Faulkin, Tunnel company	— 10	Stanford Tunnel Co.	10 10
Falls	— 8	Schenectady	— 7
Falls, Consol.	— 4	Sledge	20 25
Fresno	5 9	Silver Hill	65 70
Gals of Clyde	9 10	Silver Hill, Bodie District	— 7
Great Eastern	— 5	St. Louis	— 5
General Hooker (Con.)	10 25	Tascau	3 10
General Jackson	13½ 14	Tiger	—
Gibraltar	35 50	Tucker	— 15
Golden Harvest	— 5	Union	10 25
Golden Gate	— 25	Utah Tunnel	20 30
Governor Seymour	— 25	Utah	100 150
Golden Age	32 45	Ural proper	5 20
Great Britain	6 9	Ural [extension]	— 10
Golden Era <sup>17</sup> Tunnel Co.	2 3	William Tell	— 2½
Greenback	20 35	Wide West	— 395
Harvey	— 10	Windsong, Tunnel comp.	—
Hawley	— 30	Western Summit	90 110
Hathorn Tunnel Co.	\$12 15	X-Eliza and Constantinople	—
Harrold Consol	— 16	consolidated	1½ —
Horne Check, Excelsior Dis	3 5	Yancey	45 50
Idaho	10 18		



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary.	Locality of Office.	Capital Stock.	Par Value	Shares per foot.	Assets to date	Name of Company	Locality of Mine	Name of Secretary	Locality of Office.	Capital Stock.	Par Value	Shares per foot.	Assets to date
ROTH WINDSOR TUN CO.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	\$100,000	\$100	1	\$	MORAVE, G. S. & Copper	La Paz, Colorado.	G. J. Turner.	606 Montgomery st	\$250,000	\$250	30	\$
ANTHONY SPEC. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	400,000	500	1	640	BLUE RIDGE MINING CO.	Slate Range.	G. J. Turner.	606 Montgomery st	240,000	100	2	1
JEFFERSON. G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	60,000	100	1	200	JOHNSON, SLATE RANGE	Slate Range.	G. J. Turner.	606 Montgomery st	254,500	100	2	1
COOK. G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	400	SAN RAFAEL SLATE RANGE	Slate Range.	G. J. Turner.	606 Montgomery st	210,000	100	2	1
CEKAR. G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	1,350	CATUAGA MINING CO.	Slate Range.	G. J. Turner.	606 Montgomery st	195,000	100	2	1
SOTOGAME. G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	1,350	VIENNA DISTRICT.	Vienna District.	N. Shiverick.	Mer. st. Mt. bldg	600,000	500	1	1
SENORA. G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	1,350	COLE.	Vienna District.	W. E. Wood.	123 California st.	1,500,000	500	1	15,000
RED WHITE & BLUE G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	1,350	HAWLEY. G. & S.	Devil's Gate Dist.	C. Stevens.	6 Parrots Building	850,000	400	1	2,200
LILLY OF THE WEST G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	1,350	PEYTONA. G. & S.	Vienna District.	C. Stevens.	6 Parrots Building	1,000,000	100	1	1
STICK. G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	1,350	CLARK CREEK. G. & S.	Esmeralda District	C. Stevens.	6 Parrots Building	1,000,000	100	1	1
BULLION. G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	1,350	MIDGORD. G. & S.	Esmeralda District	H. Waterman.	618 Merchant str.	240,000	100	1	1
LAUREL HILL Mining Co.	Tuolumne County	C. S. Higgins.	410 Montgomery st	300,000	100	1	290	OHEDA. G. & S.	Esmeralda District	E. Daniels.	Cashier Custom H.	670,000	500	1	1
UNION. G. & S.	Telescopo District.	C. S. Higgins.	410 Montgomery st	1,620,000	100	1	290	RHOES DIGGINGS M. CO.	Sacramento County	G. Touchard.	414 Montgomery st	570,000	400	1	2,280
COMBINATION. G. & S.	Telescopo District.	C. S. Higgins.	410 Montgomery st	900,000	50	2	6,275	SAM WRIGHT.	Aurora, Mono Co.	E. Worth.	547 Washington st	700,000	500	1	700
BULLION. G. & S.	Russ District.	C. S. Higgins.	410 Montgomery st	400,000	50	2	23,000	S. L. CLARK.	Aurora, Mono Co.	E. Worth.	547 Washington st	120,000	200	1	600
WHITE & MURPHY, G. & S.	Virginia District.	J. P. Nourse.	Lucas & Turners bldg	126,000	500	2	68,000	FEDERAL UNION.	Aurora, Mono Co.	J. P. Bailey.	505 Sacramento st	300,000	500	1	600
BURNING MOSCOW. G. & S.	Sonora, Mexico.	J. P. Nourse.	Lucas & Turners bldg	2,200,000	100	1	45,000	JOSEPHINE. G. & S.	Coso District.	W. W. Lawton.	606 Montgomery st	1,200,000	250	1	1,000
BUCKEYE. G. & S.	Silver City.	P. S. Carier.	115 Sansome st.	28,000	100	1	3,200	NEVADA COPPER M. CO.	Grass Valley, Nev.	John Armstrong.	610 Washington st	120,000	200	1	1,200
AMERICAN. G. & S.	Virginia District.	R. L. Taylor.	612 Washington st	700,000	100	1	1,050	CINCO SEÑORES. G. & S.	Sinaloa, Mexico.	John Armstrong.	610 merchant str.	240,000	200	2	1,200
FRANCES. G. & S.	Slate Range Dist.	A. H. Clark.	522 Montgomery st	1,500,000	500	1	1,050	JACK HAYES.	Esmeralda District	J. H. Blood.	7 Montgomery Bldg	60,000	50	1	1
SLATE RANGE. G. & S.	Slate Range Dist.	A. H. Clark.	522 Montgomery st	1,500,000	500	1	1,050	TEDESSE. G. & S.	Esmeralda District	J. H. Blood.	7 Montgomery Bldg	50,000	50	1	1
ROCHESTER. G. & S.	Slate Range Dist.	A. H. Clark.	522 Montgomery st	315,000	150	1	315	SAN PATECH. G. & S.	Esmeralda District	J. H. Blood.	7 Montgomery Bldg	100,000	100	1	1
PALADEPHIA. G. & S.	Slate Range Dist.	A. H. Clark.	522 Montgomery st	315,000	150	1	315	FULTON. G. & S.	Esmeralda District	J. H. Blood.	7 Montgomery Bldg	100,000	100	1	1
NEW YORK. G. & S.	Slate Range Dist.	A. H. Clark.	522 Montgomery st	315,000	150	1	315	KOLBER BROS.'S.	San Antonio, L. C.	Kohler Bros.	7 Montgomery Bldg	100,000	100	1	1
CATARAUGUS. G. & S.	Slate Range Dist.	A. H. Clark.	522 Montgomery st	315,000	150	1	315	MONTE CARLO. G. & S.	Esmeralda District	J. H. Blood.	7 Montgomery Bldg	100,000	100	1	1
LADY BRYAN. G. & S.	Flowerly District.	J. F. Bailey.	605 Sacramento st	500,000	100	1	1,380	Mount Davidson & Co.	Virginia District.	P. A. Fabens.	47 Montgomery Bldg	2,000,000	200	44	10,500
DESERT M. CO.	Flowerly District.	David Wilder.	522 Montgomery st	440,000	150	1	5,000	Meredith. G. & S.	Virginia District.	E. B. Holmes.	712 Montgomery st	900,000	150	2	1
ADRIATIC. G. & S.	Flowerly District.	S. R. Rooney.	7 & 8 Gov't House	270,000	100	1	600	Pioneer Coal. G. & S.	Coso District.	E. B. Holmes.	712 Montgomery st	450,000	100	1	2,750
EVANSTON. G. & S.	Humboldt, N. Ter.	J. H. Gager.	Merch. st. Mt. bldg	120,000	100	1	60	Manzanillo. G. & S.	Sinaloa, Mexico.	E. Eddy.	616 merchant str.	660,000	100	1	1
NORTH STAR. G. & S.	Humboldt, N. Ter.	J. H. Gager.	Merch. st. Mt. bldg	440,000	100	1	60	Moss. G. & S.	Virginia District.	R. T. C. Page.	428 Montgomery st	6,000,000	500	1	1
CRANFORD. G. & S.	Humboldt, N. Ter.	J. H. Gager.	Merch. st. Mt. bldg	200,000	100	1	60	Madison. G. & S.	Esmeralda District.	P. B. Corwell.	608 merchant str.	800,000	500	1	1
ESTRELLA DEL MONTE. G. & S.	Humboldt, N. Ter.	J. H. Gager.	Merch. st. Mt. bldg	150,000	100	1	60	South Utah. G. & S.	Esmeralda District.	P. B. Corwell.	608 merchant str.	800,000	500	1	1
MANHATTAN. G. & S.	Humboldt, N. Ter.	J. H. Gager.	Merch. st. Mt. bldg	150,000	100	1	60	North Idaho. G. & S.	Esmeralda District.	P. B. Corwell.	608 merchant str.	800,000	500	1	1
LIVE OAK COPPER. G. & S.	Gopher, Calav. Co.	J. H. Gager.	Merch. st. Mt. bldg	252,000	210	1	1,380	Alameda Coal Min'g Co.	Alameda County.	L. Francou.	Lucas & Turner bldg	150,000	500	18	1
SIGEL. G. & S.	Humboldt, N. Ter.	J. H. Gager.	Merch. st. Mt. bldg	240,000	500	1	67	Gould & Curry. G. & S.	Virginia District.	J. C. L. Waisworth.	712 Montgomery st	2,400,000	500	1	6,000
OCCIDENTAL. G. & S.	Emma Francis dist.	J. H. Gager.	Merch. st. Mt. bldg	600,000	500	1	67	Kate. G. & S.	Humboldt Nev. Ter.	L. Francou.	712 Montgomery st	180,000	100	1	450
ANNE LAURA. G. & S.	Humboldt District.	J. H. Gager.	Merch. st. Mt. bldg	670,000	500	1	67	Hope. G. & S.	Humboldt Nev. Ter.	L. Francou.	712 Montgomery st	180,000	100	1	450
STARLIGHT. G. & S.	Humboldt District.	J. H. Gager.	Merch. st. Mt. bldg	670,000	500	1	67	Opbir. G. & S.	Virginia District.	Thos J. Lamb.	Rm. 1, Express bldg	5,000,000	200	12	1
ETNA. G. & S.	Esmeralda District.	W. A. Wuesthorpe.	Merch. st. Mt. bldg	120,000	100	1	67	Santiago. G. & S.	Silver City District.	A. E. Reed.	617 Clay street.	2,800,000	100	1	1
ALAMBRERA. G. & S.	Devil's Gate Dist.	J. O. Stanch.	Merch. st. Mt. bldg	120,000	100	1	67	Noble Copper Min. Co.	Calaveras County.	E. A. Reed.	617 Clay street.	1,100,000	500	1	1
WIDE WEST Mining Co.	Esmeralda District.	S. Patten.	522 Montgomery st	1,300,000	500	1	67	Norman. G. & S.	Virginia District.	E. A. Reed.	617 Clay street.	1,100,000	500	1	1
REAL DEL MONTE, cons.	Esmeralda District.	S. Patten.	522 Montgomery st	1,760,000	400	1	14,300	Sierra Nevada. G. & S.	Virginia District.	J. H. Brewer.	40 Montgomery Bldg	1,600,000	500	1	110,000
ESMERALDA Mining Co.	Esmeralda District.	S. Patten.	522 Montgomery st	1,600,000	500	1	6,400	Early Dawn. G. & S.	Devil's Gate Dist.	J. H. Brewer.	40 Montgomery Bldg	200,000	150	1	1
ESMERALDA, N. Extens'n	Esmeralda District.	S. Patten.	522 Montgomery st	900,000	1000	1	18,200	Porter. G. & S.	Lamb Leige.	R. C. Page.	40 Montgomery st	300,000	500	1	1
SILVER HILL, Consol'd	Esmeralda District.	S. Patten.	522 Montgomery st	1,500,000	500	1	27,000	Scorpion. G. & S.	Virginia District.	W. H. Martin.	617 Clay street.	400,000	100	1	12,000
ASTROLOPE. G. & S.	Esmeralda District.	S. Patten.	522 Montgomery st	200,000	500	1	1,000	Ruby. G. & S.	Silver City District.	W. H. Martin.	617 Clay street.	1,000,000	100	2	1
LOUISA. G. & S.	Flowerly District.	J. F. Pope.	115 California st.	300,000	300	1	92,250	Silver City. G. & S.	Gold Hill District.	R. H. Walker.	127 Clay street.	240,000	100	1	12,500
ROCKES. G. & S.	Flowerly District.	J. F. Pope.	115 California st.	300,000	100	1	4,500	Sierra. G. & S.	Genoa District.	S. P. Vandyeke.	127 Clay street.	600,000	800	1	2,500
ALAMO. G. & S.	Lower California.	S. Sprague.	72000	500	1	8,400	Silver City Qtz. Mill Co.	Silver City.	E. Bauer.	414 Washington st	1,200,000	100	1	1	
BELLA VISTA. G. & S.	Virginia District.	E. C. Lovell.	436 Jackson street	280,000	100	1	8,400	Albion. G. & S.	Slate Range.	W. H. Clarke.	224 Montgomery st	210,000	100	1	1,050
BURNSIDE. G. & S.	Esmeralda District.	R. N. Van Brunt.	706 Montgomery st	800,000	400	1	15,800	Milwaukee. G. & S.	Slate Range.	W. H. Clarke.	224 Montgomery st	270,000	100	1	1,050
BANDER. G. & S.	Virginia District.	R. N. Van Brunt.	706 Montgomery st	1,200,000	1000	1	15,800	Morrow, East. G. & S.	Slate Range.	W. H. Clarke.	224 Montgomery st	180,000	100	1	1
IOWA. G. & S.	Virginia District.	R. N. Van Brunt.	706 Montgomery st	1,200,000	1000	1	15,800	Albany, East. G. & S.	Slate Range.	W. H. Clarke.	224 Montgomery st	180,000	100	1	1
CATHOES TUN & CO. G. & S.	Virginia District.	R. N. Van Brunt.	706 Montgomery st	1,200,000	1000	1	15,800	Mountain View. G. & S.	Slate Range.	W. H. Clarke.	224 Montgomery st	240,000	100	1	1
NORTON. G. & S.	Reese River Dist.	R. N. Van Brunt.	706 Montgomery st	1,200,000	1000	1	15,800	Washington. G. & S.	Slate Range.	W. H. Clarke.	224 Montgomery st	210,000	100	1	1
RESE RIVER. G. & S.	Sonora, Mexico.	R. N. Van Brunt.	706 Montgomery st	264,000	90	1	17,000	Sacramento, East. G. & S.	Slate Range.	W. H. Clarke.	224 Montgomery st	270,000	100	1	1
SAN MARCEL. G. & S.	Virginia Dist.	G. W. McAneny.	712 Montgomery st	1,600,000	1000	1	108,000	Santa Rosa. G. & S.	Virginia District.	Nelson Hudson.	Front street.	1,200,000	500	1	1
SAVAGE MINING CO.	Virginia Dist.	G. W. Young.	Cor Mont & Jckn.	1,650,000	300	137	144	Sacramento. G. & S.	Virginia District.	W. Moore.	408 California st.	900,000	500	1	1
CALIFORNIA. G. & S.	Virginia Dist.	G. W. McAneny.	712 Montgomery st	540,000	300	1	108,000	Willow Springs G. & S.	Coso District.	J. H. Snyre.	224 Montgomery st	270,000	100	1	1
CENTRAL. G. & S.	Virginia District.	C. L. Farrington.	509 Sacramento st	1,000,000	500	1	64,000	Sol Lewis. G. & S.	Esmeralda District.	H. C. Chambers.	22 merchant str.	700,000	100	1	1
CEKAR HILL M. & T. Co.	Virginia District.	F. Dean.	53 Montgomery block	1,880,000	300	25	2,800	Tesoro. G. & S.	Lower California.	H. C. Kibbe.	608 Sacramento st	200,000	100	1	18,000
CEKAR. G. & S.	Virginia District.	W. E. Jones.	53 Montgomery block	1,200,000	500	1	1,600	United States. G. & S.	Lower California.	J. D. Croigh.	7 & 8 Gov't House	240,000	100	1	1
CHENANGO. G. & S.	Gold Hill District.	John Evans.	338 Montgomery st	270,000	150	1	16,000	William & W. G. & S.	Lower California.	J. D. Croigh.	7 & 8 Gov't House	240,000	100	1	1
CROWN POINT. G. & S.	Esmeralda District.	John Woodthorpe.	326 Clay street.	60,000	100	1	16,000	Washington. G. & S.	Gold Hill District.	D. A. Jennings.	Jackson, cor. Frnt	1,000,000	500	1	1
CHARLES CADEY. G. & S.	Esmeralda District.	John Woodthorpe.	326 Clay street.	60,000	100	1	16,000	Coso. G. & S.	Coso District.	E. W. Chambers.	11 Court Bldg.	1,950,000	500	1	1
CORCORAN. G. & S.	Esmeralda District.	John Woodthorpe.	326 Clay street.	60,000	100	1	16,000	Pride of Esmeralda.	Esmeralda District.	J. F. Bailey.	605 Sacramento st	800,000	500	1	60
EMMETT. G. & S.	Esmeralda District.	James Neary.	326 Clay street.	60,000	100	1	16,000	Ida G. S. Mining Co.	Russ District.	David Wilder.	522 Montgomery st	510,000	300	2	60
DOYLE. G. & S.	Esmeralda District.	James Neary.	326 Clay street.	60,000	100	1	16,000	Table Mountain Cop. Co.	Calaveras County.	M. G. Elmore.	5 & 8 Montgomery st	757,000	500	1	1
ISAACS. G. & S.	Esmeralda District.	James Neary.	326 Clay street.	60,000	100	1	16,000	Colosa G. & S. M. Co.	Virginia District.	P. R. dis. Humb.	5 & 8 Montgomery st	800,000	500	1	1
KOTLER. G. & S.	Esmeralda District.	James Neary.	326 Clay street.	60,000	100	1	16,000	Valley Winkle & S.	Esmeralda District.	M. G. Elmore.	5 & 8 Montgomery st	800,000	500	1	1
LIVINGSTON. G. & S.	Esmeralda District.	James Neary.	326 Clay street.	60,000	100	1	16,000	Schmetzky & Co.	American de Hum.	M. G. Elmore.	5 & 8 Montgomery st	300,000	100	2	42
VIBRADO. G. & S.	Esmeralda District.	James Neary.	326 Clay street.	60,000	100	1	16,000	San Francisco G. & S. M. Co.	San Francisco.	M. G. Elmore.	5 & 8 Montgomery st	1,400,000	500	1	42
LAS CRUCITAS mining co.	Mexico.	cor. J. C. N. & Frnt	225,000	125	1	1	1	Flowerly Mill Company	Flowerly District.	James P. Cuck.	707 Sansome st.	100,000	100	1	1
DALE. G. & S.	Esmeralda District.	Joseph R. Beard.	4 Armyory Hall.	1,600,000	200	1	400	Foundation M. & T. Co.	Esmeralda District.	A. Davidson.	Oakland.	300,000	100	1	1
LILY DALE. G. & S.	Esmeralda District.	Joseph R. Beard.	4 Armyory Hall.	240,000	300	1	850	Francisco Americano	San Antonio, L. Cal.	S. A. Gould.	508 clay street.	350,000	750	10	1
MAMMOTH, No. 1. G. & S.	Esmeralda District.	Joseph R. Beard.	4 Armyory Hall.	210,000	300	1	850	Gaulehouse.	Chihuahua						



PALMER, HANSCOM & CO.,

**OLDEN STATE IRON WORKS,**  
No. 10, First Street, San Francisco,  
British Castings and Machinery of all kinds

ALSO:

**GENUINE WHITE IRON SHOES AND DIES.**  
PALMER, HANSCOM & CO.

**To Quartz Miners.**

**Knox's Improved  
AMALGAMATING PAN,  
WITH  
PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST  
complete and efficient of the precious metals of  
the process now known.

By its steam is introduced in the most effective and eco-  
nomical manner, while it is peculiarly adapted to the  
sliding floating gold and silver, known to be other-  
wise lost. Made exclusively by

PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted to the undersigned upon Steam Chest False Bot-  
toms for the Inside of Amalgamating Pans or Tubs, and  
cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

**VULCAN IRON WORKS CO.**  
TORQUET.....MANAGER.  
R. IVERS. C. R. STEIGER. S. AITKEN.

**Steam Engine Builders,  
Boiler Makers, Iron Founders and Gen-  
eral Engineers,**

No. 137 & 139 First Street, - - - - - SAN FRANCISCO.

STEAMBOAT MACHINERY built and repaired; also Saw,  
and Quartz Mills, Pumping and Mining Machinery,  
etc., etc., etc.

Proprietors of Morse's Patent Fire Grates,  
VAL, FOURSEYTON and other Turbine Water Wheels  
with latest improvements.

**DEETKEN'S  
Chemical and Metallurgical Works,**  
On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REAS-  
ONABLE PRICES. ALL THE GOLD EXTRACTED BY CHEM-  
ICAL PROCESS. Yield of Sulphurets from 20 to 50 per cent  
higher than the BEST AMALGAMATION PROCESS.**  
Apparatus for separating Sulphurets set up by ex-  
perienced hands at a cost of \$50 to \$100, if desired by  
owners. No power nor clean water required for  
purpose. nov8-3m

**LEWIS COFFEY AND RISDON,  
TEAM BOILER AND SHEET IRON  
WORKS.**

The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
Old Work, executed as ordered, and warranted as  
quality.

Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
LEWIS COFFEY J. N. RISDON.

**JAMES PHELAN,  
(LATE J. & M. PHELAN.)  
IMPORTER AND JOBBER,  
Wines, Liquors, Etc., Etc.,  
Nos. 616 & 618 Front street,  
Between Jackson and Pacific Streets,  
Established 1849. SAN FRANCISCO.**

All Goods Guaranteed. Orders Solicited.  
TERMS LIBERAL. Jan. 1-1f.

**THEODOR KALLENBERG  
Maker of Models  
FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophi-  
cal Instruments, Scales, Weights, etc.; Steel  
stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
(7.3m) San Francisco.**

**Volcanic Smelting Furnace.**

PERSONS DESIRING INFORMATION AS TO THE USE  
of a patented process of the furnace, and in-  
tending to make use of the same, when satisfied of its  
superiority over all other means of reducing ores and  
separating metals from the sulphurates, can obtain all  
needed explanation and advice in regard to the same, and  
the terms of sale of rights to use the same, on application  
to J. D. Stevenson or T. Ogg Shaw, or by letter to the  
proprietors through the Post Office at San Francisco.  
Drawings may be seen at the office of Col. J. D. Stevenson,  
No. 614 Merchant street, or at the office of T. Ogg Shaw,  
in Brannan's Building, Montgomery street.

The time required for reducing ores by this Furnace  
is from three to eight hours, and the amount of fuel only  
one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace  
which will save all those portions of precious metals  
which usually escape in a volatile form.  
The attention of all interested in the subject is requested  
to examine the important results obtained by this pro-  
cess.

Parties wishing will be allowed to erect a trial Fur-  
nace of a capacity for smelting one ton of ore or more, on  
signing an obligation to pay the usual fee for the right to  
use it, should they continue to make use of the invention  
or a longer period than two months.  
Feb 16 MRS. E. J. WALL, M.D., Proprietress.

**New Style of Lady's Buckle.**  
W. BOHM, INVENTOR & PATENTTEE

THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the  
construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
possesses several very important improvements over any  
other in use.

The invention having been carefully examined at the  
Patent Office, has been adjudged to be a useful improve-  
ment, and Letters Patent have been granted for 17 years.  
It excels all other buckles in

**Usefulness, Strength and Appearance.**

The Public is respectfully invited to call and examine  
this Buckle at the Jewelry Establishment of

DRAVEYMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 1 Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold will be guaranteed as to its Strength  
and Durability. W. BOHM, Patentee.

**LEANDER RANSOM,  
Civil Engineer  
AND  
SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**  
And as such having the sale of  
600,000 ACRES OF STATE SCHOOL  
LANDS,

**At the low price of \$1.25 per Acre.**

Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. cor-  
ner of Montgomery and California streets. oct7-3m

**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

**CROCKERY,  
GLASS WARE,  
FRENCH CHINA,  
Coal Oil Lamps, Table Cutlery,  
CLOCKS,  
Silver Plated and Britania Ware,  
ETC., ETC., ETC.**

NO. 516 SANSOME STREET,

[CORNER OF MERCHANT,]

SAN FRANCISCO.

**The Occidental Hotel**

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVE-  
ments, and will be conducted equal in every re-  
spect to the first class houses of the Atlantic cities.  
The spacious READING AND EXCHANGE ROOMS, have  
been fitted up with special reference to the comfort and  
convenience of the public generally, having a

**News Stand,  
AND A LARGE  
CABINET FOR MINERALS;**

ALSO  
A Branch Telegraph Office,  
Connecting with all the lines throughout the country.  
LEWIS LELAND & CO.,  
Proprietors.  
San Francisco, Jan. 1st, 1863.

**John R. Sims,**



Oregon street, between Washington and Davis and Frea  
and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and  
Shutters, Bank Vaults, Grating, Cemetery Rail-  
ings. All orders from the interior of Oregon, Washington  
Territory, Vancouver's Island, British Columbia, or any  
place on the Pacific coast, attended to with promptness  
and dispatch.**

**Mr. Sims Appreciates the Past**  
liberal patronage of his friends, and trusts that he may  
continue to merit it in the future.

**For the Information of Strangers**  
he would say that he feels confident that his expe-  
rience in his particular calling is surpassed by none on  
this coast, which his superior work, sent to almost eve-  
ry town in this state, Oregon, also Victoria and the Sand-  
wich Islands, and to be seen on some of the best build-  
ings in San Francisco, fully attest. A large assortment  
of second hand shutters for sale at low rates. ap13

**NATHANIEL GRAY,  
General Furnishing Undertaker,  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.**

**FULTON FOUNDRY & IRON WORKS  
HINCKLEY & CO.,  
MANUFACTURERS OF**

**Steam Engines,  
QUARTZ, FLOUR AND SAW MILLS; CAST IRON  
FRONTS, FOR BUILDINGS, MINING PUMPS,  
AND ALL KINDS OF MACHINERY, ETC.,  
FIRST STREET,  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.**

\* \* All kinds of IRON AND BRASS CASTINGS furnished  
at short notice. Every style of FINISHING to Iron when  
cast. Repairing of Machinery neatly done. Prices low.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FRIED.

**W. T. & J. GARRATT,  
City Brass and Bell Founders  
Cor. First & Market sts., San Francisco.**

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE  
and Lift Pumps, Church and Steamboat Bells, Tay-  
nor and Hand Bells and Gongas, Hose and all other joints;  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PIPES and NOZZLES FOR MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.,  
COUPLING JOINTS of ALL SIZES. Manufacturers of "Gar-  
ratt's Patent Improved Journal Metal."**

**SQUARZA'S PUNCH.  
FIRST PREMIUM  
AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.**

**ALSO; FIRST PREMIUM  
At the San Francisco Bay District Agricultural Fair, 1862  
MANUFACTORY, WHOLESALE AND RETAIL,  
No. 44 Leidsdorff street,  
Opposite the What Cheam House, San Francisco.**

**TO OWNERS OF WATER-POWER**

**Beth's Hydraulic Pressure Wheel**

**THE SIMPLE, COMPACT, STRONG AND**  
effective manner in which it is applied to any height of  
fall, (3 feet to 300,) and to any kind of machinery, will  
Save in Transportation, Material and Labor, from  
25 to 60 per cent. of the entire cost of the  
Structure to which it is applied, and propor-  
tionally increase its value.  
For full information from the Inventor, apply at the  
Miners' Foundry, from 10 to 11 A. M., or address  
J. M. BETH.  
Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan 19-1f

**To Mine Owners.**

**PARTIES having a Good silver Mine**  
and wishing for  
Machinery to work it for an interest in the Mine  
Will do well to apply at this office. No organized com-  
pany need apply.

**50 lbs. MARINE and  
Fire-Proof Paint,**

**MANUFACTURED BY THE PACIFIC METALLURGICAL  
Works in this city, for Hulls and Decks of Vessels,  
iron ground. Mineral Rock contains Arsenic, Copper, Li-  
tharge and six other Minerals. When used on the Decks  
or Bottoms of Ships, it is equal to a coat of Stone, and  
quite equal to Copper, no worms will ever effect it, and  
cheaper than any other paint.**

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur  
three parts Mineral Paint, mix with Coal Tar and apply  
it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes  
of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal  
to covering them with a coat of Stone, being perfectly  
Fire Proof, and costing less than any paint.

**DIRECTIONS:**

**HOUSE:**—Mix three parts Mineral Paint with one part  
white lead, thin with Linseed oil; if a lighter color is  
wanted, mix less paint, more lead.

**ROOF:**—Five parts of Mineral Paint, one part white  
Lead; mix with Linseed oil. Put it thick on a tin Roof  
as one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
G. T. FOUQUE, Superintendent.

**WORKS, North Beach; Office, 318 Cal-  
ifornia st., San Francisco.**

**WRIGHT'S PICKS.**

**JOHN WRIGHT, of Sacramento, has established him-  
self in San Francisco for the manufacture of every  
description of PICKS, of the best material, at reduced  
prices. Pick Eyes of the best iron furnished in any quan-  
tity, at low rates. Orders from the country promptly  
attended to. N. B.—None genuine unless stamped with  
my name. JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.**

**REMOVAL.**

**OFFICE OF THE PACIFIC METAL  
lurgical Office is removed to 318 California street  
having enlarged our Works at North Beach, we are  
now enabled to reduce from 10 to 15 tons of Silver or  
Gold rock per day.  
Gold and Silver ore, and Sulphuret Assayers', or Sil-  
versmiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in  
cash, for shipments. S. C. BRADSHAW, Agent,  
318 California street, near Sansome.**

**WANTED,  
GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,**

By FRONTIER A. DEVERCY,  
13 ap 487 Pine street, San Francisco.

**FREDERICK MANSELL,  
MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,  
No. 422 California street, corner of Leidsdorff.**

Drawings of Models made for parties applying for pa-  
tents at Washington or London. mar23 2m



## SPECIAL NOTICES.

**Office of the Table Mountain Copper Co.**  
An assessment of Twenty-five cents per share was this day levied upon the capital stock of this Company, payable immediately, in gold coin of the United States, to the Secretary, at the office of the company, No. 523, Montgomery street.

M. G. ELMORE, Secretary.  
San Francisco, May 18, 1863. Im

**The Annual Meeting of the Stockholders** of the Table Mountain Copper Company will be held at the Office of the company, No. 323 Montgomery street on the second Monday in June next, at 7 P. M.

M. G. ELMORE, Secretary.  
San Francisco, May 18, 1863. td

**Office of the Nevada Copper Mining Co.**  
March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees,  
J. ARMSTRONG, Secretary.

**Office of the Tennessee Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees held April 22, 1863, an Assessment of One Dollar and Fifty cts per share upon the capital stock of said Company was levied, payable on or before Saturday, the 23d day of May, 1863.

J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863. [tma21]

**Office of the San Francisco Gold and Silver Mining Company, No. 7 Montgomery Block.**—At a meeting of the Board of Trustees, held April 20, an Assessment of One Dollar (\$1) per share on the capital stock of this Company was levied, payable on or before Thursday, May 21, 1863.

J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863. [ma21]

**Office of the Sam Patch Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees held March 30, 1863, an Assessment of Fifty Cents, (50 cts.) per share on the capital stock of said Company was levied, payable on or before Thursday, April 30, 1863.

J. H. BLOOD, Secretary.

**Schmeltzer Gold and Silver Mining Company.**—At a meeting of the Board of Trustees of this Company, held April 11, 1863, an assessment of 25 cents per share was levied, payable in United States coin, to the Secretary, at the office of the company, No. 500 Montgomery street, on or before FRIDAY, April 17, 1863.

ap20.1m M. G. ELMORE, Secretary.

**J. F. & H. H. SHAFER**  
Manufacturers of and Dealers in  
**BEDDING and FURNITURE,**  
of every description,  
Blankets, Comforters, Sheets, Etc., Etc.  
Nos. 504 and 506 Sansome Street,  
(Near Clay.) San Francisco.

This Establishment is now generally known to be the Cheapest Place in the City for good Bedding.  
Branch Store.....Road St., Nevada.

**T. C. Sanborn & Co.**  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**  
**GOULD & CURRY MINING STOCK,**  
**CHOLLAR MINING STOCK,**  
**CALIFORNIA STEAM NAVIGATION CO'S STOCK,**  
**BOUGHT & SOLD.**

**WHEELER'S**  
**Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated on the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

no16-tf ZENAS WHEELER.

**PEOPLE'S**  
**Steamship Line!**  
connecting California and New York  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**

J. H. BLETHEN..... COMMANDER

Will be dispatched for  
SAN JUAN DEL SUR,

From Mission street Wharf.

WEDNESDAY, - - - - June 10, 1863.

Punctually at 9 o'clock, A. M., on

Connecting at GREYTOWN with the Splendid Steamship

AMERICA - - - - - 2500 Tons.

Reduced rates of Passage and quick trips are secured by the re opening of the Nicaragua Route.  
These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to  
I. K. ROBERTS, Agent,  
a20 No. 407 Washington Street, opp. Post Office.

**International Hotel,**  
JACKSON STREET, - - - - - SAN FRANCISCO,  
[A few doors above Montgomery.]

FIRE-PROOF BRICK BUILDING.

Most convenient to the  
Steamer's Landing, Business sts. & Places of Amusement

OPEN ALL NIGHT.

City Railroad Cars Pass the Door.

REDUCTION IN PRICES.

Fine Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**  
and SETS AS GOOD A TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

**Tremont House,**  
418 and 420 - - - - - JACKSON STREET,  
[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY** advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,

WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL.

F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

**Percy Douglas,**

IMPORTER OF

**CROCKERY,**

**FRENCH CHINA,**

Glass Ware, Etc., Etc.

No. 421, MONTGOMERY STREET.

SAN FRANCISCO.

**A. C. MORSE,**  
Mining and Real Estate Agent,

Office—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS** with MINER S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

**MYERS & DAGGETT'S**

**Mining and Stock Exchange,**

No. 23½ B Street, Virginia City, N. T.

*Mining Stocks of All Kinds Bought & Sold.*

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* Abstracts of Titles Furnished, Etc.

**Pacific Mail Steamship Company.**

**NOTICE.**

**ARRANGEMENTS HAVE BEEN MADE** by which shipments of

**Gold, Silver and Copper Ores**

can be forwarded under through Bills of Lading from San Francisco to England, at reasonable rates. For further particulars apply to

A. B. FORBES, Agent,

28-4f Corner Sacramento and Leidesdorff streets.

**P. M. STEAMSHIP COMPANY.**

**NOTICE.**

**Until further notice, the Steamers of** Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above date sail on Sunday, the steamer will be dispatched on the following Monday.

A. B. FORBES, Agent.

**Wm. P. TAAFFEE,**

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,**

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

**A. ROMAN & Co.,**

WHOLESALE AND RETAIL

**Book Establishment,**  
417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.  
Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Piggot on the Chemistry and Mining of Copper.  
Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Phipps.  
Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.  
Practical Assaying, by Michell.

Silver Ores and Silver Mines, by Pro. Blake.  
Ure's Dictionary of Arts, Manufactures and Mines.  
Weisbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.  
Fresenius' Chemical Analysis.  
**Together with many other works in this and similar lines**

Books imported to order on short notice.

A. ROMAN & Co.

417 & 419 Montgomery Street.

**New Patent Agency.**

**WE HAVE CONNECTED WITH THE** Publication of the "MINING AND SCIENTIFIC PRESS"

**The Patent Agency Business,**

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency**

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco.

EWER & SMITH.

**FOREIGN PATENTS OBTAINED**

By application at this office, Room 27, Federal Building.

EWER & SMITH, Solicitors.

**NOTICE TO INVENTORS.**

Inventors wishing to file Covenants should apply at this Office, Room No. 27, Federal Building. Terms moderate.

EWER & SMITH.

**PATENT RIGHTS.**

**Patent Rights Bought and Sold,**

At the office of the "Mining and Scientific Press" Agency.

EWER & SMITH.

**IMPORTANT TO INVENTORS.**

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors.

EWER & SMITH.

**P. M. S. CO.**

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the month of May, 1863.

May 13th, - - - - - Steamer Orizaba

May 23d, - - - - - Steamer Golden Age

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

Je4 Corner of Sacramento and Leidesdorff sts.

**Miners' Foundry**

—AND—

**MACHINE WORKS**

First St., between Howard & Folsom,  
SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS** Machinery, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quar mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* Parties desiring to test their ores practically, small quantities will be afforded ample facilities, free cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING.

San Francisco, February 23, 1863.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, JUNE 1, 1863.

NO. 31.

## SPECIAL NOTICE.

We wish it distinctly understood that all the interest which Julius Silversmith ever had in the MINING AND SCIENTIFIC PRESS, ceased in November of 1862. EWER & SMITH are now the publishers and proprietors.

## FROM THE AMADOR COPPER MINES.

JACKSON, MAY 25, 1863.

MR. EDITOR:—I send herewith a box of specimens from the Oriental Company's Claim on the Oriental Copper Lode. No. 1 is taken from the most prominent croppings, in the middle of the claim. Here the walls stand apart 20 feet, and between them is what old copper miners call a "bloom," indicating an immense mine. The walls and the gossan between them, are well defined through one thousand feet of the claim, in a straight line. No. 2, is from one of the boulders of ore that were found on the vein above the surface. No such ore is found in any part of the vein except near the surface.

The gangue has all the varieties common to well defined lodes, three specimens of which I send you. The malachite occurs near the surface. Then comes the "horn ore" and red oxide, rich in copper, occurs, as the casing of the vein, and at the depth of 25 feet, give place to the black oxides, containing copper and silver, with traces of gold. This casing hugs the head wall, and is but a few inches thick. Next to this occurs a solid vein of black oxide and yellow and gray sulphates of copper, varying from one foot to five in thickness. The "live mudic" then occurs filling the balance of the lode to the foot wall.

We have, as yet, only fairly commenced to open this mine. As we proceed I will keep you posted as to all new developments. The shaft we are now putting down is by no means on the best part of the mine, and the most interesting developments are yet to be made.

The lodes in this district run North, 15° West, and South 15° East, and the underlie, or dip is to the East from 10 to 20 degrees.

THE COSSUNNES CO., whose mine is near and West of the Oriental have out, and ready for shipment from Five to Seven Hundred Tons of excellent ore. These two and the Newton mine are the only ones in Amador county which are taking out ore in large quantities; but several others are being opened with splendid prospects. Thousands of dollars are changing hands, daily, in this County, on Copper "feet," but the mines that are opened the best, and which are rich beyond a doubt, are not in the market. You will please take notice, down at the Bay, that little Amador is an immensely rich County. More anon.

Yours Truly, I. B. FISH.

A GRAND UNION PROMENADE CONCERT will be given by the Temperance Societies of San Francisco, in aid of Mr. H. T. SLIFER, on Thursday Evening, June 11, 1863, at Platt's Hall. Ticket, (admitting Gentleman and Lady,) One Dollar.

## THE DEL NORTE COPPER MINES.

We learn from a gentleman recently from the Del Norte Copper Region, that heavy shipments of ore may soon be expected from that quarter. The lack of road communication between the mines and the seaboard has hitherto been a great hindrance to the working of the mines of that region, as energetically as their developments warrant. This inconvenience has now however been in a great measure overcome and the miners have already commenced work in earnest. The Alta Company have about 400 tons now ready for moving, and their mine is so opened that they can easily raise fully 2000 tons additional before the raining season sets in. The Evoca Company are also raising good shipping ore and have several tons already upon the surface. New developments and important discoveries are constantly being made and the excitement consequent thereupon is drawing off day laborers to an extent which if continued will render it impossible for the old companies to procure the necessary labor to continue their regular working.

We have the promise of full and regular correspondence, which will keep our readers posted with regard to mining progress in that district.

We would take occasion to mention, in this connection, that persons interested in the mines of this region, or desirous to become acquainted with their locations, will find a very full and accurate lithograph map of this country, giving the location of the principal mines, roads, etc., at Bancroft's, on Montgomery Street. This map has been carefully prepared by Mr. R. B. Randall, County Surveyor of Del Norte, and will be found very full and correct.

## THE HUMBOLDT SALT MINE.

The Salt Mine of the Humboldt District has been carefully surveyed, and fully taken up and recorded. The entire survey embraces 17,000 acres. The salt deposit covers an area of 11,000 acres; the balance of 6,000 acres included in the survey, consists of salt marsh of the strongest brine. This marsh has been included in the survey for the purpose of preventing outsiders from coming in and manufacturing salt from this brine, and thus interfering with the monopoly which the holders of the deposit hope to maintain. Under a monopoly of the kind foreshadowed, this deposit must become very valuable, as it lays directly on the probable track of the Pacific Railroad, and immense quantities will soon be required for the treatment of silver ores, in addition to that needed for domestic purposes. We presume the entire location will eventually be consolidated into one Company.

The valley in which this remarkable deposit is found is supposed to be about 500 feet below the bed of the Humboldt River, and is a region of the most intense heat in the summer season. The depth to which the salt reaches is unknown. On sinking into it, water or rather brine commences percolating into the shaft or excavation at the depth of five or six feet, and an opening thus made will, in a few hours fill quite up to the surface of the deposit. This wa-

ter will, by crystallization, soon become a solid mass of the purest and whitest salt. The depth of the deposit has not been ascertained, and probably never will be known. The quality of the salt has been found, by careful analysis, to be very superior, fully equal to the best Liverpool. A wagon road is now in process of construction to connect the Salt Mines with Reese River.

## GOLD MINING IN WALES, ENGLAND.

We have received a communication from our former fellow citizen, J. MOSHEIMER, Esq., now operating among the mines of Dalgelly, in North Wales. Mr. M. writes, in substance, as follows, with regard to those newly developed gold fields:

"If I should tell you that there are, in reality, good gold mines in Wales, you would place just as much confidence in the statement as the people of California did in the first reports of the discovery of silver mines in Washoe. So it is here. People in London, not only the common people, but scientific men also, will not believe what they can learn, by the evidence of their own senses, in a journey of 12 hours. They are so prejudiced in the matter that they pronounce it all a humbug that paying gold mines exist within a few hours ride of London. Yet it is a fact 448 lbs of gold has recently been taken from a single mine in Wales. When I first talked of visiting these mines, people in London said to me, 'don't go down there, it is not worth your while; there is no gold mine there that will pay.'"

I nevertheless went, and have since put up machinery, worked some of the ore, and obtained about one ounce per ton, and I am now putting up six Reduction Works for different Companies."

Mr. M. writes that in addition to the *unbelief* which so generally exists, with regard to the reality of the gold mines, there is also a great lack of *knowledge* with regard to mining for gold. Much prejudice also exists in relation to the introduction of any foreign appliance for the saving of gold, or the reduction of its ores, and our correspondent thinks if the mines are generally found to pay it will not be in consequence of the skill displayed in working them, but because the mines are rich and labor cheap. He also writes that the loss in working is enormous, and that if any person ventures to suggest any new appliance he will not be listened to a moment. Mr. M. is thoroughly conversant with regard to late improvements in working ores both in California and Germany, either of which countries he considers for an ad of Wales in the particular speciality of gold mining.

We should be pleased to hear often from our correspondent, but would suggest that he should endeavor to be as liberal as possible in regard to pre-existing modes and ideas of working. California as well as England, and indeed every other country, is usually extremely sensitive about casting aside established ideas and modes of mechanical operation for that which is new or, to them, untried. Mr. M. however, is taking the right method to convert his unbelieving neighbors by putting his new machinery to actual test. Men will seldom refuse to acknowledge the evidence of their senses, especially when it bears directly upon their pockets.



## WATER PRESSURE AS A MOTIVE POWER.

Among the many problems that science offers her votaries for solution, none perhaps have attracted more attention than the attainment of the most economical and safest application of power to machinery. The application of steam and the introduction of coal have wrought greater changes in the world, during the past century, than all other human appliances combined, from the days of Archimedes to the present era. The great mechanical study of the present time is the possibility of superceding steam. Air, electricity and water or hydraulic pressure, are the means sought to be employed in accomplishing this object. Ericksen has already made himself famous by his efforts in one direction, and something approximating to practicability has been accomplished in bringing into subjection the subtle though tremendous power of electricity. Many inventors are also in the field searching for some mechanical contrivance by which to render available, for motive purposes, the powerful force exhibited in the ordinary Hydraulic Press. Motion, to a limited extent, and in a rectilinear direction, is easily communicated to a column of water; but the difficulties in the way of its practical application for driving machinery, must appear to all conversant with ordinary hydraulic operations, as very great. Still, various mechanical contrivances have, from time to time, been devised which to a great extent, have overcome these difficulties. The first machine of this kind, of which we have seen any notice, was erected in England in 1765. Improvements have been made from time to time, by other inventors. These machines were at first constructed for pumping, at the mines and like the early steam engines used for such purposes, the upward movement of the piston was produced by a weighty leverage. Cylinders are now, however, constructed, much after the manner of the ordinary steam cylinder, and the water is made to drive the piston rod in both directions. An engine is now at work in the Alport mines, Derbyshire, England, with a cylinder 50 inches diameter with 10 foot stroke, estimated at 108 horse power. Another engine of somewhat different construction, but by the same make, is in operation at the Minera Mines in North Wales, with a 35-inch cylinder, 10-foot stroke, pressure column of water 227 feet high, pressure on the piston 98 lbs. per square inch, in a total weight of 40 tons on the piston. This machine is said to work very satisfactorily, requiring no personal attendance. The motion is certain and continuous so long as the working parts remain in order; consequently the cost of maintaining it is of the most trifling amount.

A late English paper gives a description of still another machine of this sort, recently invented by Mr. Henry J. Lewis, an Engineer connected with the water works establishment of Wolverhampton, Eng. This machine is now doing the actual work of a large steam engine, in the most satisfactory manner. Its mechanism in appearance is much the same as that of the steam-engine, with the exception that it has two globes or air vessels upon the cylinder. The action is very simple. The water is supplied to the engine from the main by means of an ordinary pipe, and can be turned on or off by means of a common stop-cock at pleasure. When the engine is about to be set to work, the water is allowed to pass into a chest or nozzle, within which is a slide-valve, the same as is used in a steam-engine. The water, having filled the nozzle, rushes through the passage that is not covered by the slide-valve into the cylinder, forcing the piston along with it, at the same time compressing the air in one of the globes or air-vessels until the slide-valve shuts the passage; when the air that is now compressed in the one globe, by giving a certain amount of elasticity to the water acting on the piston, enables the crank to continue its motion. After the valve has covered the one passage, preparatory to opening the other passage for the return stroke of the engine, the same process is repeated. The rectilinear motion is converted into a rotary motion by means of a connecting rod and crank, and applied to the purpose for which it is required by ordinary pulley bands.

The advantages which would attend the successful introduction of water pressure engines must be very great. Such machines could be used wherever it is convenient to take water from a main service pipe, in cities or elsewhere, or wherever a small supply of running water can be obtained at a great elevation—an incline of any extent being equally as available as a perpendicular fall. No boiler or boiler fix-

ings or cumbersome water-wheel would be needed. There would of course be perfect freedom from danger by explosion. It would require no supervision beyond the mere turning of a stop-cock to start or stop it. It may be worked at long or short intervals and no time need be lost in "firing up." The construction according to the above description is very simple and would in consequence be of slight cost, while the charge for water would be much less, even when purchased as in cities, than the expense incurred for coal and attendance upon a steam engine.

An engine possessing such advantages would be of incalculable value in California where its applicability would be so extensive for the various purposes of pumping, lifting, milling, &c.

## HUMBOLDT CORRESPONDENCE.

UNIONVILLE, N. T. MAY 21, 1863.

EDITOR MINING AND SCIENTIFIC PRESS.—In my last letter I confined myself principally to Buena Vista District. I shall endeavor now to put your readers upon some of the other districts although I am not so well posted myself as I might wish to be. I will commence with Star which has the Sheba, Mammoth, Franklin, Yankee, Jeff. Davis, Daniel Webster and many other very good ledges. The Sheba already has a great reputation in your city, and as nothing that I could write would be likely to increase the confidence of your citizens in the richness of that mine, I will simply say that scientific and practical miners have pronounced it the richest mine in the world. They are at work on the Jeff Davis, Webster, Yankee and American Bason Companies' claims. All of these ledges are supposed to be good and they will all soon be opened in fine style. In Star district also is the San Bernard ledge which is the best defined of any ledge in the Humboldt mines. It crops out from eight to twelve feet wide and about three miles in length. The Enterprise, Eagle and San Bernard Companies are now at work sinking shafts on each of their claims. This ledge runs across the mountain into Humboldt district. The mineral is of a superior quality and pretty well defined through the ledge. In Santa Clara several companies are at work, among them are the Magna Charta, Kentucky, Excelsior and Wyoming. The Wyoming, Union and Tehama companies have recently filed their articles of incorporation. The principal place of business of these companies is Santa Clara with a branch office in San Francisco.

## HUMBOLDT DISTRICT.

In Humboldt District they are at work on the Winne-mucca, Jenny Lind, Melrose, Humboldt and Critenden ledges, most of them taking out paying ore. The Highland ledge, in this district is very rich and well defined and arrangements are now being made to have it opened.

## SIERRA DISTRICT.

In Sierra District considerable work is going on. The Auld Lang Syne company are now hauling rock to Homfray's mill for crushing. The Cressus is also at work with fine prospects. The Douglon, Badger and Annie ledges are looking up.

## ALABAMA DISTRICT.

In Alabama District the Oro Fino Company are running their tunnel as fast as possible; will probably be in within a month.

The Bowling Green and Glenbrook companies filed their articles of incorporation last week—incorporating in this Territory. The former with a capital stock of three hundred thousand and the latter with a capital stock of one hundred and eighty thousand dollars. The Bowling Green ledge is thirty feet wide and rich in silver on top and nothing to do but haul the rock to the mill and have it crushed. In this district is the Solo, Missouri, Golden Fleece and many other rich ledges.

## TABLE MOUNTAIN DISTRICT.

In Table Mountain district the Champion and Silver Cord ledges are taking the lead. They are both very wide and well defined. The shaft on the Champion is down about fifty feet and they are taking out some excellent ore. In Echo district the Washington company are sinking their shaft as fast as possible and taking out some fine specimens of native silver.

In Indian and American districts but little work

is going on, yet there are some very fine ledges there. The Moonlight heading the list of course.

In Buena Vista the work of opening claims is going on briskly. Many companies are being incorporated. Some of them in San Francisco, but most of them in this Territory.

A road has recently been laid out from this place to the Salt Mines, connecting with the Reese River road or at the mouth of Cottonwood Cañon on the Overland Route at Fairview Station, making the distance from this place to Reese River eighty miles.

Near Cotton Cañon is a high range of mountains which bear evident signs of violent volcanic eruptions and, from the indications, a body of burning lava must be near the surface. Not a particle of vegetation can be seen, and upon removing the crust or surface for a depth of four or five inches the heat is quite intense. Near the mountain brimstone is found in considerable quantities, also fine specimens of native copper.

## EXTENT OF THE HUMBOLDT MINES, &amp;c.

What is now known as the Humboldt mines is double in extent to what it was six months ago. The East Range is beginning to attract as much notice as any other portion of the mines. Most of the ledges there are large and well defined and as far as prospected they are rich.

Timber is quite plentiful on the East Range, which is no small item in a mining country; but the old Humboldters will still keep on prospecting and extending their prospecting tours to the second and even third ranges East. I hope the immigration from California will be composed of men who are not afraid to exercise their muscle, and that they will be content to develop and work the ledges that the uneasy and roving adventures find for them.

Our country is settling up quite rapidly and I presume from what I can learn by parties recently from California, that the arrivals at the present time are nothing to be compared to what they will be in a few weeks. But let them come there is work and room enough for all that may arrive and if they are not satisfied with the country they will certainly differ with

QUARTZ.

IMPROVEMENTS.—Numerous substantial improvements are constantly being made on all the principal business streets throughout the city. Indeed the prospects of our city and state were never so flattering as at this present time. The astonishing developments of the principal silver mines on the Eastern Slope; the continued, if not increasing yield of the gold mines within our own state, and the now settled conviction, that we are just entering upon a new branch of mining, which is soon destined to fully equal in importance either silver or gold, is inspiring capitalists with a degree of confidence in the permanency and growth of our city, which they never before have felt. This confidence is every where manifesting itself in valuable city improvements, and in the construction of a vast amount of heavy machinery for the still further development of our mines. San Francisco is now making most rapid advancement in both commercial and mechanical enterprise. With the development of the mines, especially those of copper, commerce and mechanics must go hand in hand, and will continue "marching on," until the Queen City of the Pacific shall occupy a position in the foremost rank of the great cities of the world.

IMPRESSION OF LEAVES.—Take half a sheet of fine paper and cover the surface with sweet oil. Let it stand a minute or two, then rub off the superficial oil and hang the paper in the air; when almost dry, move the paper slowly over the flame of a lamp or candle till it is perfectly black. Lay on it the plant or leaf; place a piece of clean paper over and rub it equally with the fingers for half a minute; then place the plant or leaf on the scrap-book where it is desired to have the impression; cover it with blotting paper, and on repeating the rubbing a representation of the plant will appear, equal to the finest engraving.

NEW SUBWAY IN LONDON.—A new subway for gas and water mains is talked of in London, and ere long every prominent street in that city will be tunneled by a subterranean receptacle for the numerous mains which underlie all the thoroughfares. They would certainly save much annoyance and expence, by avoiding the necessity of so frequently breaking up the streets, as is now indispensable whenever water or gas is introduced into a house.



## RAILROAD FROM MARYSVILLE TO OREGON.

S. G. Elliott, Esq., of Auburn, has recently returned on a preliminary examination for a railroad from Marysville to Oregon. The distance is about 600 miles, and the route is pronounced eminently practicable, and admissible of any grade, with the exception of a section of about 50 miles over the mountains from Klamath to Rogue Rivers. With this exception the road is mostly through level valleys. Money enough has been guaranteed along the proposed line of the road to pay for a preliminary survey, which will be undertaken forthwith. Oregon, Interior and Northern California are rich in iron, coal, copper, lumber, fruit, agricultural productions, wool, etc., all of which would find a market and cheap transportation over the proposed railroad. The people and the "solid men" along the route and all through the interior of Oregon are enthusiastic for the road. Its construction at an early day, will be found not only a convenience but an imperative necessity.

**GOLD ON THE HEAD WATERS OF THE MISSOURI.**—Mr. Burleigh, the Indian Agent, writes to Commissioner Dole, at Washington, that gold in immense quantities has recently been discovered near the head waters of the Missouri, 200 miles west of Fort Benton. The 800 miners who are already there from California and Columbia River, are averaging \$15 and \$20 a day.

**THE NEW ZEALAND GOLD MINES.**—Advices in the latest English papers from Otago, New Zealand, estimate the weekly product of gold at that point at 10,000 to 15,000 ounces, equal to \$10,000,000 a year. New gold fields were being opened in all directions.

**EFFECTS OF IRON PLATING ON VESSELS.**—A communication from Toulon, France, in the *Messenger du Midi*, says: "The laying up of the frigate *La Gloire* in the Castigeanu dock has disclosed three unexpected phenomena. First, that the contact of the copper lining and the submerged iron plates had established a galvanic current, which produced the effect of a voltaic pile, and was completely deteriorating the armor of the frigate in the parts below the water lines; secondly, that a species of shell fish, hitherto unknown, was afterwards discovered among the millions of molluscs by which the hull was covered, apparently produced under the influence of the same galvanic current; and lastly, in the hold of the vessel 22,000 litres of wine were found to be transformed into vinegar, it is not known by what influence."

**THE NEW ORGAN** which has been imported for Music Hall, Boston, is described as a splendid affair. Its cost when finished, will be upwards of \$60,000.

## TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metalliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; that rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel,

and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphurets alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collectors, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector. These articles will be published under the head of "THE MINER'S LABORATORY," and will be found of great value to the mining public. [*Mining and Scientific Press*, April 20.]

**SUBSCRIBE.**—Are you a miner and not a subscriber to the *MINING AND SCIENTIFIC PRESS*? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the *Press*, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the *MINING AND SCIENTIFIC PRESS*. We invite all to send us their names and *four dollars*, or *two dollars* for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the *Press* for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

## Mining and Scientific Press.

The *MINING AND SCIENTIFIC PRESS* is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, Proprietors.

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. SKETCHING and ENGRAVING, Designs of every description—Buildings, Sketches of Towns, Machinery, Stamp Mills, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. Patrons will remember that when we execute engravings we will insert them free of charge in the *MINING AND SCIENTIFIC PRESS*, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Art, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers:—Four Dollars per annum.

## Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$20.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2.60. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## Our Mint, its Rules, Charges and Operations.

## For parting silver from gold when gold

is below 300-1000ths. fine . . . . . 3cts per oz.  
" from 30-100ths. to 750-1000ths fine. 7 cts " " oz.  
" " 750-1000ths to 950-1000ths " 14 cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.



## THE MINERS' LABORATORY.—NO. V.

## MUNDIC—PYRITES.

One of the most common characteristics upon and near the surface of a vein of copper is the appearance of large quantities of Pyrites—sometimes called Mundic. Whenever this mineral is so found, in great abundance, especially if in a region productive of copper, the miner may have the utmost confidence in prosecuting the work of developing his vein. Pyrites are most usually yellow, varying from nearly the color of gold to an iron white.

Pyrites sometimes contain, mechanically mixed, small quantities of gold. They are then called "auriferous pyrites." The gold mines of California contain large quantities of this description of mineral, and thousands of tons are now being worked for this metal. They are, here, usually concentrated from the sands which have passed through the ordinary gold amalgamating processes. One of the most extensive and perhaps the most thorough establishments for working auriferous pyrites, is that carried on by Mr. Deetkin, a short distance from this city, on the San Bruno road.

Copper pyrites constitute the principal ore of that mineral, and frequently occur very massive, occupying the entire width of a vein, sometimes many feet in thickness, but oftener in strings and bunches comprising but a small percentage of the entire contents of the vein. Copper pyrites is not considered a rich ore. Their yield of copper is usually from 12 to 20 per cent, rarely reaching 25. The richness of this ore may generally be pretty correctly estimated by its color. If of a fine yellow color and readily yielding to the hammer it may be considered a good ore; but if hard and of a pale yellow color it may be set down a poor quality of ore. The color and consequently the value of this ore is attributable to the more or less abundant presence of iron.

## GOSSAN.

We hear much said among copper miners and prospectors for copper, about "gossan," and furthermore that the appearance of gossan is a good indication of copper—and so it is. The question is also often asked, "What is gossan?"

Gossan is nothing more nor less than decomposed mundic, or iron pyrites. It is usually of a yellowish color, sometimes, however, approaching to black or dark red. The general composition of gossans oscillates between the two extreme results as given below:—

	No. 1.	No. 2.
Quartz .....	10	85
Water and Crenate of Ammonia.....	10	3
Oxide of Iron, etc.....	80	12
	100	100

The term, gossan, originated in Cornwall, and for a time was local, but is now quite generally used in this country also. The existence of mundic or its common resultant, gossan, is not universal. In some rich mining districts no iron, or very little at most exists in the veins; in such, the ferruginous stain is wanting and gossan is not seen.

In California, we presume, from copper explorations thus far made, and from the general character of all our quartz veins, gossan will be almost universally met with, and wherever it or mundic is found, rich and valuable ores of copper, and possibly of tin may be confidently looked for at depths ranging from 15 to 50 feet beneath. Gossan, of itself, is generally of but little value, although it sometimes contains small quantities of both gold and silver, and not unfrequently copper. It is often found, in small quantities, far down on the vein.

Beneath the gossan, we frequently observe appearances strongly reminding us of the common electrotype process for procuring copper from a solution of sulphate of copper. The pure metal is gathered together in chinks and cavities between the main mass of gossan and the body of the undecomposed copper pyrites, mingling perhaps with the lower part of the former. Sometimes this native copper, as it is called, may retain its metallic character; but at others it becomes converted into an oxide, and this again into a carbonate, by the percolation of waters containing common air and carbonic acid.

With regard to the formation of this native copper it is probable that the sulphur, by a union with the needful oxygen, becomes sulphuric acid, and that, this formed, the copper is attacked and removed to be dealt with like any other solution of the sulphate of copper.

We can hardly conceive it possible that the copper, in fluid state, has been forced up from below like dikes of porphyry or greenstone. An elastic force sufficient to raise a fluid mass of three times the density of lava would shatter the enclosing walls, and force the copper into the fissures. If this were its origin, we ought to find it occupying the depressions in the surface rocks in the vicinity of the fissures, like modern lava cu rents.

We find the copper investing various crystalized minerals; and every wave and stria of the pre-existing crystals is faithfully represented. It is impossible, by any artificial method, to cast any metal so as to exhibit such minute lines. They are as delicate and faithful as could be obtained by the electrotype. Again, the associated minerals do not exhibit the effects of a high temperature. Also, if the contents of the veins were the result of injection, their productiveness would be unaffected in their passage through different mineral planes. Lastly, copper and silver combine in indefinite proportions, forming a homogeneous compound; and yet we find them existing side by side almost chemically pure. Admitting that they once formed a homogeneous compound, it is reasonable to suppose that they have been separated by electro-chemical agency.

We shall speak more fully of this supposed electrical action in copper and other mineral veins, in a future number.

[We have received, from a thorough and practical mineralogist, a communication, containing much valuable information, in addition to what we have already given, explanatory of the various methods by which the presence of copper in any mineral or other matrix may be readily ascertained by the prospector; also a list of the chemicals and other apparatus requisite for such tests. We shall insert the communication, next week, under our Laboratory head.]

## PRACTICAL MEN WANTED.

The Mechanics of San Francisco have inaugurated a movement which ought to command the attention of all thinking men throughout the State, and, indeed, throughout all the States. At a meeting of the mechanics, held in this city, on Thursday Evening last, it was resolved that the exigencies of the times urgently demand that at least one of the three Representatives to be chosen at the coming election should be a person of known practical, mechanical attainments, and one who should be thoroughly posted with regard to the mechanical interests and wants of the State and country.

We most cordially endorse the sentiments and importance attached to the purpose of the meeting above referred to. The Resolutions have been widely circulated by the press of the city, and their substance will be known to all of our readers before this sheet reaches them. The movement should not be confined to San Francisco, but should be made general throughout the State.

We would beg leave to add one amendment to the movement, and that is, in addition to the selection of a suitable member to represent the mechanical interest, another should be selected with reference to his peculiar fitness to correctly and intelligently represent the mining interest. Let the Miners and Mechanics of the State join hands, and demand, of the convention which is to assemble on the 17th of June next, that they should put in nomination, two individuals who shall be suitable persons to represent the two great leading industrial interests of the State. If they fail in doing that simple act of justice, let such steps be taken forthwith as shall make the politicians, FEEL that the mechanics and miners of California are a power in the State, having rights and interests at stake, which cannot be overlooked for the sake of mere political gain, or the spoils of office.

CHANGE OF NAME.—What was the *Hesperian* comes to us this week in its old form and with its former Editor, but under a new name. The "*Hesperian*" and "*Pacific Monthly*," appear to have joined hands, and the subscribers to both of those periodicals will hereafter be supplied with the new "*Pacific Monthly*," published in octavo form and under the Editorial Management of J. D. and M. D. STRONG. The Editorial corps is a strong team, and we doubt not will furnish their readers with a Magazine which shall be a fair exponent of the literary status of the Pacific Coast.

## THE PEAVINE MINING DISTRICT.

Considerable attention has recently been attracted to the Peavine Mining District, a locality on the western border of Nevada Territory, and a short distance to the northward of the Henness Pass Route. A late correspondent of the *Bulletin*, of this city, gives some facts with regard to this district which we have condensed as follows:—

The name, "Peavine," had its origin from a solitary vine of that name, which one of its early visitors discovered growing near a spring, and not as generally supposed from an abundance of this nutritious herbage growing in the valley. The most of the ledges now being worked were discovered only some three months since. On a few of these ledges shafts have been sunk from 30 to 50 feet, but on most merely a little "scratching" has been done to hold them.

## COPPER INDICATIONS, &amp;c.

Most of the ledges show croppings of a greenish substance indicating the presence of copper intermixed with coarse grains of gold. This kind of rock generally runs out at a distance of 15 or 20 feet from the surface and is succeeded by quartz varying in colors and firmness as well as in the value of the metal it contains. Other ledges, again, commence with white, blue, black, and yellow quartz, resembling much the character of ore discovered in and around the Virginia City, and in most of which gold is plainly visible to the naked eye, and which, also, upon a proper test, yield richly in silver.

The lodes located in the hill to the right of the town appear in the following order: The Lucky Bill, White Diamond, Magnolia, Bevil Hammer, Green Mountain, Katy Wakeman, Offield, Carondelet and Virginia ledges. Leaving these and passing over the hill to the westward you reach the Lone Star, Mountain Sheep, Dix, Black Hawk, Irish American and Mammoth—a well defined ledges. To the left, and a mile or more distant, you discover the Young America, Star of the West, Kitty Clyde, White Sugar, Summit, Monitor, and Yuba ledges. The last three named have been but lately discovered, and from present appearances bid fair to excel them all. Some of the rock recently taken out is not only rich in gold and silver, but shows masses of copper almost in its pure state. I am confident that a ton of this rock now outside of the mine will yield from \$1,000 to \$2,000 in gold, and I think the copper left will yield from 40 to 60 per cent; and an assay lately made shows silver to the amount of \$90 to the ton. Other claims have been carefully tested, both in assays and the old fashioned method of pounding up and panning out, and although they do not equal the claim spoken of above, yet they show sufficient "indications" to warrant the belief that they prove rich. The Lone Star and Young America stand foremost in the list; and in fact there is none where the ledges are fairly struck that do not show good prospects. But in order to work these mines successfully, it requires not only patient labor and considerable outlay of money, but what is still more requisite, suitable mills and experienced workmen. That mills can be run here at a small cost is evident from the abundance of wood and water near at hand.

A few days travel by way of Downville will bring mining capitalists direct to these mines. The greater part of the travel and transportation from California to the Humboldt river will pass this way by the new road now being built and to be pushed to completion during the present summer.

An important improvement in naval architecture has been satisfactorily tested this week. The steamer Kate has been tried at the Nore with a double screw—an arrangement which enables her to steer herself rapidly and easily without any use of the rudder, and to turn with the greatest facility where ordinary steamers find the operation one of much difficulty. Should the rudder be shot away, the screws, which are not at all exposed to the enemy's shot, would still give complete steering power. [London Spectator, March 7th.]

GLUE FOR READY USE.—To any quantity of glue use whiskey, instead of water. Put both together in a bottle, cork it tight set away for three days, when it will be fit for use without the application of heat. Glue thus prepared will keep for years, and is at all times fit for use except in cold weather, when it should be set in hot water.



	Bid.	Asked		Bid	Ask'd
Alpine	\$4	10	Keeney	30	—
Anador	10	5	Live Yankee	15	—
Atlantic	—	—	Lord Byron	7	12
Arctic	6	10	La Plata	12	18
Antelope	—	—	Mañu Esmeralda	45	60
Alturas	15	—	Monroe	—	—
Atina	—	—	McKinstry Tunnel Co.	—	10
Brazil	12	20	Monte Cristo, Tunnel co.	—	40
Rode Bluff Consolidation	—	20	Mutual	—	10
Bodie Peak, Bodie District	—	8	Mount Braley	—	16
Bright Star	10	15	Mina Real	—	4
Bimbo	50	60	Modish	—	6
Bulhon (Van Horn Dist.)	—	—	North Willing Springs	50	75
Bodie Bluff, No. 1	12	18	New Esmeralda Consol.	—	6
Bodie Bluff, No. 2	—	5	Nevada	60	—
Bunker Hill	14	15	Nevada, (Tunnel)	—	10
Bonaparte, Tunnel comp.	—	30	Ozark	—	20
Caucasian	—	25	Old Winnemucca	—	5
Ulmah	—	10	Paul Tunnel Co.	—	5
Crockett	50	60	Pacific	15	—
Cape	—	—	Pond	—	70
Davis, consolidation	—	—	Pride of Antelope	10	15
Durging	—	9	Peru (two ft. to the share)	—	15
Delta	—	8	Pennsylvania Tunnel Co.	—	4
East Essex Ex. Ural	—	12	Real Del Monte	125	—
Excelsior, Excelsior Dist.	3	10	Rebecca	15	—
Empire	28	—	Red, White & Blue	—	20
Franklin, Tunnel company	—	10	Stanford Tunnel Co.	—	7
Fallsburg	11	—	Strawberry	20	15
Fallsburg, Consolidation	4	5	Strawberry	20	25
Fresno	9	9	Silver Hill	65	85
Falls of Clyde	9	10	Silver Hill, Bodie District	—	7
Great Eastern	5	—	St. Louis	—	5
General Hooker (Con.)	10	25	Tuscan	3	10
General Jackson	13 1/2	14	Tiger	—	4
Garibaldi	35	60	Tucker	12	15
Golden Harvest	—	5	Tennessee	12	25
Golden Cross	25	25	Union Tunnel	20	30
Golden Geyser	—	25	Utah	100	120
Golden Age	32	45	Ural proper	—	500
Great Britain	6	9	Ural [extension]	—	10
"Golden Era" Tunnel Co.	2	3	William Tell	—	2 1/2
Greenback	20	35	Wide West	—	395
Hanover	—	—	Washington, Tunnel comp.	—	8
Howard Tunnel Co.	—	10	Western Summit	90	110
Heath	\$12	15	X-Lexia and Constantinople consolidated	1 1/2	—
Horned Frog	3	15	Yankee	45	60



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary	Locality of Office	Capital Stock.	Par Value	shrs per foot.	ass'ts to date	Name of Company	Locality of Mine	Name of Secretary	Locality of Office	Capital Stock.	Par Value	shrs per foot.	ass'ts to date
ELITE WESTERN TUNNEL CO.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	\$ 100,000	\$100	1		MOLAVE, G. S. & Copper	La Paz, Colorado	G. J. Turner.	606 Montgomery st	\$ 250,000	\$50		
ANTILLOPE "PUP" G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	400,000	500	1		BLUE RIDGE MINING CO.	Slate Range.	G. J. Turner.	606 Montgomery st	240,000	100	3 ft	\$
JEFFERSON G. & S.	Gold Flat Nevada	T. L. Bibbins.	305 Montgomery st	500,000	500	1	640	MADISON, SLATE RAIL CO.	Slate Range.	G. J. Turner.	606 Montgomery st	264,000	100	2 ft	
COOK G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	60,000	100	1	480	SAN FRANK. SLATE RAIL CO.	Slate Range.	G. J. Turner.	606 Montgomery st	210,000	100	2 ft	
CLARK G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	600	CAYE G. MINING CO.	Slate Range.	G. J. Turner.	606 Montgomery st	195,000	100	2 ft	
STOGAMS G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	14,000	100	1	1,250	TRIMONT.	Virginia District.	N. Shiverick.	Mer. St. Mutny blk	600,000	500	1	
SENeca G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1		COLORADO	Virginia District.	W. E. Wood.	123 California st	1,600,000	500	1	15,000
RED WHITE & BLUE G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1	600	HAWLEY G. & S.	Devil's Gate Dist.	C. Stevens	6 Parrots Building	880,000	400	1	2,200
LILA OF THE WEST G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1		Virginia Dist.	C. Stevens	6 Parrots Building	100,000	100	1		
ESTICK G. & S.	Esmeralda District	T. L. Bibbins.	305 Montgomery st	120,000	100	1		CLEAR CREEK G. & S.	Eagle & Washo dis	C. Stevens	6 Parrots Building	1,100,000	500	1	
BULFON G. & S.	San Horn District	T. L. Bibbins.	305 Montgomery st	900,000	100	1	1000	MAHONDA.	Esmeralda District	F. H. Waterman.	618 Merchant str	240,000	100	1	
LACRES HILL Mining Co.	Tuolumne County	C. S. Higgins	410 Montgomery st	300,000	100	1	290	ONEIDA.	Esmeralda District	E. Daniels.	Cashier Custom H.	600,000	500	1	
UNION G. & S.	Russ District	C. S. Higgins	410 Montgomery st	1,620,000	100	1	5,275	RHODES DIGGINGS Q. M. CO.	Sacramento Cou'ty	Gve. Touchard	414 Montgomery st	870,000	400	1	
COMBINATION G. & S.	Telescope District	C. S. Higgins	410 Montgomery st	900,000	50	2	1,700	SAM WRIGHT	Aurora, Mono Co.	E. Worth	547 Washington st	700,000	500	1	700
DELLION G. & S.	Russ District	C. S. Higgins	410 Montgomery st	400,000	50	2	23,000	S. L. CLARK	Aurora, Mono Co.	E. Bailey	547 Washington st	120,000	500	1	
WHITE & MURPHY, G. & S.	Virginia District	J. P. Nourse	Lucas & Turners bldg	150,000	500	2	68,000	FEDERAL UNION.	Aurora, Mono Co.	E. Bailey	547 Washington st	300,000	500	1	600
MINNA PIETA	Sonora, Mexico	J. P. Nourse	Lucas & Turners bldg	2,300,000	100	2	45,000	JOSEPHUS G. & S.	Devil's Gate.	Samuel Marx.	400 Montgomery st	1,200,000	250	1	
BURNING MOSCOW	Virginia District	J. P. Nourse	Lucas & Turners bldg	430,000	100	2		JEWELL.	Devil's Gate.	Samuel Marx.	610 Washington st	120,000	200	1	1,000
BUCKEYE G. & S.	Silver City	F. S. Carter	415 Sansome st	280,000	100	1	3,200	Nevada Copper M. Co.	Grass Val. Nev. co	John Armstrong.	610 merchant str.	240,000	100	2	1,250
AMERICAN G. & S.	Virginia District	R. L. Taylor	612 Washington st	160,000	100	1	1,050	CINCO SEÑORES G. & S.	Sinaloa, Mexico.	John Armstrong.	610 merchant str.	500,000	200	2	
FRANCIS G. & S.	Slate Range District	A. H. Clark	522 Montgomery st	1,500,000	500	1		JACK HAYES	Esmeralda District	J. H. Blood	7 Montgomery Bk	60,000	50	1	
SLATE RANGE G. & S.	Slate Range District	A. H. Clark	522 Montgomery st	1,500,000	500	1		TENNESSEE G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bk	50,000	50	1	
ROCHESTER G. & S.	Slate Range District	A. H. Clark	522 Montgomery st	315,000	150	1	315	SAN PATECH G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bk	100,000	100	1	
PAUL DELPHIA G. & S.	Slate Range District	A. H. Clark	522 Montgomery st	315,000	150	1		COLEMAN G. & S.	Esmeralda District	J. H. Blood	7 Montgomery Bk	100,000	100	1	
NEW YORK G. & S.	Slate Range District	A. H. Clark	522 Montgomery st	315,000	150	1		KOLLER ANTONIO, L. C.	Esmeralda District	J. H. Blood	7 Montgomery Bk	24,000	100	1	
CATARAUGUS G. & S.	Slate Range District	A. H. Clark	522 Montgomery st	315,000	150	1		LAERNE MINING CO.	Gold Hill District	J. S. Paxon	Sansome street.	900,000	500	1	
ALBANY G. & S.	Slate Range District	A. H. Clark	522 Montgomery st	315,000	150	1	7,250	Mount Davidson G. & S.	Virginia District.	F. A. Fabens	47 Montgomery Bk	2,000,000	200	44 in	20,500
LADY BRYAN G. & S.	Flowers District	J. F. Bailey	605 Sacramento st	500,000	100	1		Meredith G. & S.	Virginia District.	E. B. Holmes	712 Montgomery st	900,000	125	2	
DISSENT M. Co.	Flowers District	David Wilder	522 Montgomery st	440,000	150	1	5,000	Pioneer Coso. G. & S.	Coso District.	E. B. Holmes	712 Montgomery st	450,000	100	1	2,750
ADRIATIC G. & S.	Flowers District	S. R. Rooney	7 & 8 Gov't House	270,000	100	1	6.0	Manzanillo	Sinaloa, Mexico.	E. Eddy	616 merchant str.	600,000	100	1	
EVERETT G. & S.	Humboldt N. Ter.	J. H. Gager	Merch. St. mut blk	120,000	100	1		Moss G. & S.	Virginia District.	R. T. C. Page	428 Montgomery st	600,000	500	1	
NORTH STAR G. & S.	Humboldt N. Ter.	J. H. Gager	Merch. St. mut blk	440,000	100	1	60	Madison G. & S.	Esmeralda District	P. B. Cornwall	608 merchant str.	400,000	100	1	
CRYSPOLIS G. & S.	Silver Mtn. mono.	J. H. Gager	Merch. St. mut blk	300,000	300	1		Melones & Stani-lus Co.	Calaveras County	L. Francou	Lucas & Turner bldg	150,000	50	18 in	
ESTRELLA DEL MONTE	Humboldt dis. n. t.	J. H. Gager	Merch. St. mut blk	180,000	100	1	1,380	Alameda Coal Min'g Co.	Alameda County	L. Francou	"	500,000	100	1	6,000
MANHATTAN G. & S.	Gopher, Calav. Co.	J. H. Gager	Merch. St. mut blk	252,000	210	1		Gould & Curry G. & S.	Virginia District.	J. C. L. Wadsworth	"	2,400,000	500	1	
LIVE OAK COPPER M. Co.	Humboldt N. Ter.	J. H. Gager	Merch. St. mut blk	600,000	500	1		Kate	Humboldt Nev. Ter.	L. Francou	"	180,000	100	1	450
SIGEL G. & S.	Emma Francis dist.	J. H. Gager	Merch. St. mut blk	245,000	100	1	67	Hope	Humboldt Nev. Ter.	L. Francou	"	180,000	100	1	450
OCCIDENTAL G. & S.	Humboldt District	J. H. Gager	Merch. St. mut blk	600,000	500	1		Opdir	Virginia District.	Thos J. Lamb	Rm. 1, Express bldg	5,000,000	100	12 in	
ANNE LAURA G. & S.	Humboldt District	J. H. Gager	Merch. St. mut blk	670,000	100	1		Sanitago G. & S.	Virginia District	E. A. Breck.	"	500,000	100	1	
STARLIGHT G. & S.	Esmeralda District	William Wykes	Merch. St. mut blk	120,000	100	1		Nevada Copper Min. Co.	Calaveras county	E. A. Breck.	"	1,100,000	500	1	
ZETA G. & S.	Devil's Gate Dist.	O. J. Strauch	815 Sansome street	100,000	200	1		North Potosi	Virginia District.	E. J. Joyce	Cor. Bat. & Wash.	500,000	250	1	
ALABAMA G. & S.	Esmeralda District	S. Pattee	522 Montgomery st	1,300,000	500	1	14,800	Norman	Virginia District.	J. H. Brewer	40 Montgomery Bk	160,000	100	1	2,000
WIDE WEST Mining Co.	Esmeralda District	S. Pattee	522 Montgomery st	1,700,000	500	1	6,400	Sierra Nevada	Virginia District.	J. H. Brewer	40 Montgomery Bk	1,500,000	500	1	110,000
REAL DEL MONTE, cons.	Esmeralda District	S. Pattee	522 Montgomery st	1,600,000	500	1	6,400	Early Dawn G. & S.	Devil's Gate Dist.	J. H. Brewer	40 Montgomery Bk	200,000	250	1	
ESMERALDA Mining Co.	Esmeralda District	S. Pattee	522 Montgomery st	900,000	100	1	6,750	Porter G. & S.	Virginia District.	R. C. Page	420 Montgomery st	300,000	500	1	12,000
ESMERALDA N. EXTENS'D	Esmeralda District	S. Pattee	522 Montgomery st	1,500,000	500	1	27,000	Scorpion	Virginia District.	W. H. Martin	617 Clay street	120,000	100	2	14
SILVER HILL, Consolidat'd	Esmeralda District	S. Pattee	522 Montgomery st	60,000	500	1	1,000	Ruby G. & S.	Virginia District.	W. H. Martin	617 Clay street	120,000	100	2	14
ANTILLOPE TUNNEL CO.	Esmeralda District	J. F. Pope	115 California st.	900,000	300	1	92.50	Silver City	Silver City	O. Rixdon, Jr.	Cor. Bat. & Wash.	1,000,000	100	1	
LOUISA G. & S.	Flowers District	J. F. Pope	115 California st.	300,000	100	1	4,500	Succor G. & S.	Gold Hill District	R. H. Waller	1 Montgomery Bk	240,000	100	1	12,000
ROGERS G. & S.	Devil's Gate Dist.	J. F. Pope	115 California st.	300,000	100	1	8,400	Sierra	Goona District.	S. P. Vandye	127 Clay street	500,000	300	1	28,000
ALAMO G. & S.	Lower California.	S. C. Sprague	Cor Cal & Sansome	72,000	500	1		Silver City Q. Z. Mill Co.	Silver City	E. Bauer	414 Washington st	1,200,000	100	1	1,600
BELLA VISTA G. & S.	Virginia District	E. C. Lovell	438 Jackson street	280,000	100	1	15,600	Albion G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	210,000	100	1	1,600
BURNSIDE G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	800,000	400	1	10,000	Milwaukee G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	270,000	100	1	1,600
BAIRD G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1	15,000	Morrow, East G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	180,000	100	1	
IOWA G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,250,000	100	1	10,000	Albany, East G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	240,000	100	1	
LABREDE TUN. CO. G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1	17,000	Mountain View G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	210,000	100	1	
NEITON G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1	108,000	Washington G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	270,000	100	1	
REESE RIVER G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1	144,000	Sacramento, East G. & S.	Slate Range	W. H. Clarke	224 Montgomery st	270,000	100	1	
SAN MARCIAL G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Santa Rosa G. & S.	Virginia District.	Nelson Hudson	Front street	1,200,000	600	1	
SAVAGE MINING CO.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Sacramento G. & S.	Virginia District.	S. W. Moore	408 California st	800,000	600	1	
CALIFORNIA G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Willow Springs G. & S.	Coso District	J. H. Sayre	224 Montgomery st	270,000	100	1	
CENTRAL G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Sol Lewis G. & S.	Esmeralda District	H. C. Chambers	224 Montgomery st	270,000	100	1	
CHILLAR G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Tesoro G. & S.	Esmeralda District	H. C. Chambers	224 Montgomery st	270,000	100	1	
CHENANGO G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Union Star G. & S.	Esmeralda District	S. R. Rooney	Cor. Sansome & Cal.	540,000	100	1	
CROW POINT G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Villanar Mining Co.	Lower California.	J. D. Cronin	Cor. mer. mont st	240,000	100	1	
CHARLES CADEY G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Washoe G. & S.	Gold Hill District	D. A. Jennings	Jackson, cor. Front	1,000,000	500	1	
CORCORAN G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Coso	Coso District	E. W. Chambers	11 Court Block.	1,950,000	500	1	
EMMIT G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Pride of Esmeralda.	Esmeralda District	J. F. Bailey	605 Sacramento st	300,000	500	1	800
DOYLE G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Ida G. S. Mining Co.	Russ District	David Wilder	522 Montgomery st	610,000	250	1	500
LEACH G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Table Mountain Cop. Co.	Calaveras County	M. G. Elmore	528 Montgomery st	900,000	500	1	
ACHER G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Colusa G. & S.	Esmeralda District	M. G. Elmore	528 Montgomery st	900,000	500	1	
LIVESTOCK G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Union Winkle G. & S.	Esmeralda District	M. G. Elmore	528 Montgomery st	900,000	500	1	
VIRBARD G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Schmelzer G. & S.	Esmeralda District	M. G. Elmore	528 Montgomery st	900,000	500	1	
LAS CRUCITAS MINING CO.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		San Francisco G. & S. Co.	San Francisco	M. G. Elmore	528 Montgomery st	1,400,000	500	1	42
DANE G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Flowers Hill Mining Co.	Flowers District.	James Peck	707 Sansome st	1,000,000	500	1	
LILY DALE G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Foundation M. & T. Co.	Esmeralda District	A. Davidson	Unkland	200,000	100	10 ft	
MAMMOTH, No. 1	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Francisco Americano	San Antonio L. Cal.	A. S. Gould	508 Clay street	450,000	500	1	
MORRIS HORN G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Gaudaloupe	Chihuahua, Mexico	Wm. Blackwood	754 Montgomery st	500,000	500	1	
SOLARAD G. & S.	Esmeralda District	R. N. Van Brunt	706 Montgomery st	1,200,000	100	1		Gold Hill M. & M. Co.	Gold Hill District	Wm. Blackwood	754 Montgomery st	500,000	500	1	
COPPER HILL G. & S.	Esmeralda District	R. N													



## DESKS

AND

Office Furniture,

OF ALL KINDS.....FOR SALE BY

**JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE FURNISHING, of all kinds, attended to.

**PALMER, HANSCOM & CO.,**

**GOLDEN STATE IRON WORKS,**

No. 19, First Street, San Francisco,

urnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

**To Quartz Miners.**

**Knox's Improved**

**AMALGAMATING PAN,**

WITH

**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the melting of floating gold and silver, known to be other gold. Made exclusively by

**PALMER, HANSCOM & CO.,**

**GOLDEN STATE IRON WORKS,**

No. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. W. A. PALMER.

## DEETKEN'S

**Chemical and Metallurgical Works,**

On San Bruno Road, Islais Creek, SAN FRANCISCO.

**SOLD BEARING SULPHURETS WORKED AT REASONABLE RATES. ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 30 to 50 per cent more than the BEST AMALGAMATION PROCESS.**

**Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by owners. No power nor clean water required for purpose.** nov8-3m

**LEWIS COFFEY AND RISDON,**

**STEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing Old Work, executed as ordered, and warranted as quality.

Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY, J. N. RISDON.

**JAMES PHELAN,**

(Late J. & M. PHELAN.)

**IMPORTER AND JOBBER,**

**Wines, Liquors, Etc., Etc.,**

No. 616 & 618 Front street, Between Jackson and Pacific Streets, SAN FRANCISCO. Established 1849.

All Goods Guaranteed. Orders Solicited. TERMS LIBERAL. Jan. 1-11.

**THEODOR KALLENBERG**

**Maker of Models**

**FOR INVENTORS.**

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Maps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. No. 4 Sansome street, corner Market, San Francisco.

## Volcanic Smelting Furnace.

PERSONS DESIRING INFORMATION AS TO THE USE and economical properties of this Furnace, and intending to make use of the same, when satisfied of its superiority over all other means of reducing ores and separating metals from the sulphurets, can obtain all needed explanation and a plan in regard to the same, and the terms of sale of rights to use the same, on application to Col. J. D. Stevenson, or T. O'Gee Shaw, or by letter to the proprietors through the Post Office of San Francisco. Drawings may be seen at the office of Col. J. D. Stevenson, No. 614 Merchant street, or at the office of T. O'Gee Shaw, N. Brannan's Building, Montgomery street.

The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form.

The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of capacity for smelting one ton of ore or more, on signing an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention or a longer period than two months. nich 16 MIS' E. J. HALL, M. D., Proprietors.

## New Style of Lady's Buckle.

**W. BOHM, INVENTOR & PATENTEE**

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It excels all other buckles in

**Usefulness, Strength and Appearance.**

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of

**BRAVERMAN & LEVY,**

621 Washington Street, San Francisco.

**JOSEPH, BROTHERS,**

607 Montgomery Street, San Francisco.

**FLOBERG & CONRAH,**

118 F Street, Sacramento.

Agents for the Patentee.

Every Buckle sold will be guaranteed as to its Strength and Durability. W. BOHM, Patentee.

**LEANDER RANSOM,**

**Civil Engineer**

AND

**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL LANDS,**

**At the low price of \$1.25 per Acre.**

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct7-3m

**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

**CROCKERY,**

**GLASS WARE,**

**FRENCH CHINA,**

**Coal Oil Lamps, Table Cutlery,**

**CLOCKS,**

**Silver Plated and Britania Ware,**

**ETC., ETC., ETC.**

**NO. 516 SANSOME STREET,**

[CORNER OF MERCHANT.]

SAN FRANCISCO.

## The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**

AND A LARGE

**CABINET FOR MINERALS;**

ALSO

**A Branch Telegraph Office,**

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

**John R. Sims,**



Oregon street, between Washington and Davis and Front and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and Shutters, Bank Vaults, Grating, Cemetery Railings.** All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

**Mr. Sims Appreciates the Past**

liberal patronage of his friends, and trusts that he may continue to merit it in the future.

**For the Information of Strangers**

he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this State, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attest. A large assortment of second hand shutters for sale at low rates. apl3

**NATHANIEL GRAY,**

**General Furnishing Undertaker,**

641 Sacramento st., Cor. of Webb,

SAN FRANCISCO.

**FULTON FOUNDRY & IRON WORKS**

**HINCKLEY & CO.,**

MANUFACTURERS OF

**Steam Engines,**

**QUARTZ, FLOUR AND SAW MILLS; CAST IRON**

**FRONTS, FOR BUILDINGS, MINING PUMPS,**

**AND ALL KINDS OF MACHINERY, ETC.,**

**FIRST STREET.**

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* \* \* All kinds of IRON and BRASS CASTINGS furnished at short notice. Every style of FINISHING to iron when cast. Repairing of Machinery neatly done.

PATTERN MAKING in all its various forms. Prices low.

D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**W. T. & J. GARRATT,**

**City Brass and Bell Founders**

Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."**

**SQUARZA'S PUNCH.**

**FIRST PREMIUM**

AT THE SACRAMENTO AGRICULTURAL STATE FAIR

FOR 1862.

**ALSO; FIRST PREMIUM**

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

**No. 44 Leidsdorff street,**

Opposite the What Cheer House, San Francisco.

## TO OWNERS OF WATER-POWER

**Beth's Hydraulic Pressure Wheel.**

**THE SIMPLE, COMPACT, STRONG AND**

effective manner in which it is applied to any height of fall, (3 feet to 300,) and to any kind of machinery, will

Save in Transportation Material and Labor, from

25 to 60 per cent. of the entire cost of the

Structure to which it is applied, and proportionally increase its value.

For full information from the Inventor, apply at the

Miners' Foundry, from 10 to 11 A. M., or address

J. M. BETH.

Miners' Foundry, San Francisco.

This Wheel is fully GUARANTEED. Jan 19-63

## To Mine Owners.

**PARTIES having a Good silver Mine**

and wishing for

Machinery to work it for an interest in the Mine

Will do well to apply at this office. No organized company need apply.

## 50 lbs. MARINE and

**Fire-Proof Paint,**

**MANUFACTURED BY THE PACIFIC METALLURGICAL** Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no Worms will ever effect it, and cheaper than any other paint.

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandelers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUE, Superintendent.

**WORKS, North Beach; Office, 318 California st., San Francisco.**

## WRIGHT'S PICKS.

**JOHN WRIGHT,** of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 611 Market street, Opposite Battery, San Francisco.

## REMOVAL.

**OFFICE OF THE PACIFIC METAL.** Largest Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 35 tons of Silver, or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

**COPPER ORES**—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,

318 California street, near Sanson.

## WANTED,

**GOLD QUARTZ SUITABLE FOR**

**CUTTING JEWELRY,**

By **FRONTIER A. DEVIERY,**

13 ap 487 Pine street, San Francisco.

**FREDERICK MANSELL,**

**MECHANICAL & ARCHITECTURAL**

**DRAUGHTSMAN,**

No. 422 California street, corner of Leidsdorff.

Drawings of Models made for parties applying for patents at Washington or London. mar23-2m



## SPECIAL NOTICES.

**Office of the Table Mountain Copper Co.**  
An assessment of Twenty-five cents per share was this day levied upon the capital stock of this Company, payable immediately, in gold coin of the United States, to the Secretary, at the office of the company, No. 528, Montgomery street.

M. G. ELMORE, Secretary.  
San Francisco, May 18, 1863.

**The Annual Meeting of the Stockholders** of the Table Mountain Copper Company will be held at the Office of the company, No. 328 Montgomery street on the second Monday in June next, at 7 P. M.

M. G. ELMORE, Secretary.  
San Francisco, May 18, 1863.

**Office of the Nevada Copper Mining Co.**  
March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary.

J. ARMSTRONG, Secretary.

**Office of the Tennessee Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees, held April 22, 1863, an Assessment of One Dollar and Fifty cents per share upon the capital stock of said Company was levied, payable on or before Saturday, the 23d day of May, 1863.

J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863.

**Office of the San Francisco Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees, held April 20, an Assessment of One Dollar (\$1) per share on the capital stock of this Company was levied, payable on or before Thursday, May 21, 1863.

J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863.

**Office of the Sam Patch Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees, held March 20, 1863, an Assessment of Fifty cents, (50 cts.) per share on the capital stock of said Company was levied, payable on or before Thursday, April 30, 1863.

J. H. BLOOD, Secretary.

**Schmeltzer Gold and Silver Mining Company.**—At a meeting of the Board of Trustees of this Company, held April 11, 1863, an assessment of 25 cents per share was levied, payable in United States coin, to the Secretary, at the office of the company, No. 500 Montgomery street, on or before FRIDAY, April 17, 1863.

ap20.Jm M. G. ELMORE, Secretary.

**J. F. & H. H. SCHAFER**  
Manufacturers of and Dealers in

**BEDDING and FURNITURE,**

of every description,

Blankets, Comforters, Sheets, Etc., Etc.

Nos. 504 and 506 Sansome Street,  
(Near Clay.) San Francisco.

This Establishment is now generally known to be the Cheapest Place in the City for good Bedding.

Branch Store. . . . Road St., Nevada.

**T. C. Sanborn & Co.**

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**  
**GOULD & CURRY MINING STOCK,**  
**CHOLLAR MINING STOCK,**  
**CALIFORNIA STEAM NAVIGATION CO'S STOCK,**

BOUGHT & SOLD.

**WHEELER'S**

**Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

no16-1f ZENAS WHEELER.

## PEOPLE'S

## Steamship Line!

connecting California and New York  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**

J. H. BLETHEN..... COMMANDER

Will be dispatched for

**SAN JUAN DEL SUR,**

From Mission street Wharf.

**WEDNESDAY, - - - - June 10, 1863.**

Punctually at 9 o'clock, A. M., on

Connecting at GREYTOWN with the Splendid Steamship  
**AMERICA - - - - - 2500 Tons.**

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route. These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to  
I. K. ROBERTS, Agent,  
at No. 407 Washington Street, opp. Post Office.

**International Hotel,**

JACKSON STREET, - - - - - SAN FRANCISCO,  
[A few doors above Montgomery.]

**FIRE-PROOF BRICK BUILDING.**

Most convenient to the

Steamer's Landing, Business sts. & Places of Amusement

**OPEN ALL NIGHT.**

City Railroad Cars Pass the Door.

**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop.

Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED and NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent Spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;** and sets as good a table as any House in the City.

I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

**F. E. WEYGANT, PROPRIETOR.**

**Tremont House,**

418 and 420 - - - - Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.**

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,

**WHICH SECURES TO OUR GUESTS QUIET.**

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL

F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

**F. E. WEYGANT.**

**Percy Douglas,**

IMPORTER OF

**CROCKERY,**

**FRENCH CHINA,**

**Glass Ware, Etc., Etc.**

No. 421, MONTGOMERY STREET.

SAN FRANCISCO.

**A. C. MORSE,**

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS** with Messrs S. MARTIN Esq., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

**MYERS & DAGGETT'S**

**Mining and Stock Exchange,**

No. 23 1/2 B Street, Virginia City, N. T.

**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every description promptly and conscientiously attended to.

\* \* \* Abstracts of Titles Furnished, Etc.

**Pacific Mail Steamship Company.**

**NOTICE.**

**ARRANGEMENTS HAVE BEEN MADE** by which shipments of

**Gold, Silver and Copper Ores**

can be forwarded under through Bills of Lading from San Francisco to England, at reasonable rates. For further particulars apply to

**A. B. FORBES, Agent,**

28 1/2 Corner Sacramento and Leidesdorff streets.

**P. M. STEAMSHIP COMPANY.**

**NOTICE.**

**Until further notice, the Steamers of** Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above date fail on Sunday, the steamer will be dispatched on the following Monday

**A. B. FORBES, Agent.**

**Wm. P. TAAFFEE,**

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,**

**CARPETS, DUCK, ETC.,**

**Cor. Front and Sacramento streets,**

SAN FRANCISCO.

**A. ROMAN & Co.,**

WHOLESALE AND RETAIL

**Book Establishment,**

417 and 419 Montgomery street,

SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc.

Etc. By Frederick Overman. A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigott on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman. Gold Mining and Assaying; by Phillips.

Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake. Ure's Dictionary of Arts, Manufactures and Mines. Weisbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables. Fresenius' Chemical Analysis.

**Together with many other works in this and similar lines**

Books imported to order on short notice. &c.

**A. ROMAN & Co.**

417 & 419 Montgomery Street.

**New Patent Agency.**

**WE HAVE CONNECTED WITH THE** Publication of the "Mining and Scientific Press"

**The Patent Agency Business,**

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency**

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office) San Francisco.

EWER & SMITH.

**FOREIGN PATENTS OBTAINED**

By application at this office, Room 27, Federal Building

EWER & SMITH, Solicitors.

**NOTICE TO INVENTORS.**

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate.

EWER & SMITH.

**PATENT RIGHTS.**

**Patent Rights Bought and Sold,**

At the office of the "Mining and Scientific Press" Agency

EWER & SMITH.

**IMPORTANT TO INVENTORS.**

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described on our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors.

EWER & SMITH.

**P. M. S. CO.**

**PACIFIC MAIL STEAMSHIP COMPANY.** Line to PANAMA, connecting via the Panama Road with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the month of May, 1863.

**May 13th, - - - - - Steamer Orizal**

**May 23d, - - - - - Steamer Golden Age**

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

**A. B. FORBES, Agent.**

at Corner of Sacramento and Leidesdorff sts

**Miners' Foundry**

—AND—

**MACHINE WORKS**

**First St., between Howard & Folsom**

SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS** Machinery, the Best and Most Economical, manufactured in the state of California, will be furnished with patch at the Miners' Foundry and Machine Works, at

Steam Engines and Boilers, Flower, Saw and Quill machinery, Mining Pumps, Amalgamators, Re-tainers and Water Wheels—some in operation and on exhibition.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition. \* \* \* Parties desiring to test their ores practically in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

**HOWLAND, ANGEL & KIN**

San Francisco, February 23, 1863.





W. B. EVER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, JUNE 8, 1863.

NO. 32.

#### SPECIAL NOTICE.

We wish it distinctly understood that all the interest which Julius Silversmith ever had in the MINING AND SCIENTIFIC PRESS, ceased in November of 1862. EWER & SMITH are now the publishers and proprietors.

#### POST-OFFICE COMPLAINTS.

We hear frequent complaints from subscribers in various quarters, with regard to the non reception of papers, and have found it impossible, in several places to extend our circulation, for the only reason that the "PRESS" can not be obtained regularly from the Post-Office. We know not where the fault is. The paper is regularly mailed at the San Francisco Office, done up in strong wrappers, and carefully rected. Subscribers who fail to receive their papers regularly should first learn from their local Office, whether, when the papers do arrive, they come in good order, or whether the wrappers have been removed, etc., and communicate the facts to us. We will then endeavor to learn the cause of the irregularity, and so far as possible rectify the same.

**TREASURE SHIPMENT.**—The shipment of Treasure by the St. Louis of the 3d inst. was as follows:—

To England.....	\$766,214 43
To New York.....	184,484 21
To Panama.....	5,000 00
Previously this year.....	\$955,698 64
	20,451,139 15

Total since January 1, 1863.....	\$21,406,837 79
Corresponding period of 1862.....	14,596,066 05

Excess this year..... \$5,810,771 74  
The large and constantly increasing gain upon the treasure shipments of the last and several previous years, is a most important and note worthy fact. This excess must be set down exclusively to the credit of Washoe, and will, in all probability, reach by the end of the year nearly or quite an excess of \$15,000,000 over the shipments of 1862. The produce of California, in all probability, has fallen off the present season, in consequence of the immense draft upon the population by the mines of the Eastern Slope, and by the working and prospecting of the newly developed Copper mines in our own territory, the produce of which will make no show in our treasure shipments, but go exclusively to swell the total of our general exports. We may look for an important increase in that direction, when we come to close up the product of 1863.

**TO COPPER MINERS.**—We would call the especial attention of those engaged in raising copper ore to the advertisement, in another column, of the "Pacific Mineral Company." This is a new agency recently established in this city, for the purchase of copper ores. The Company's Office is at Room No. 1, Odd Fellows' Hall, Montgomery St.

**THE GREAT CHESS PLAYER BEATEN.**—Paul Morphy has again been beaten by Mons. de Riviere in a friendly match at chess—the latter winning three out of five games.

#### Another New Amalgamator.

The spirit of invention is still active among our mechanics, and mining improvements come in for their full share of attention. During the past week not less than four apparently important inventions, in this direction, have come under our notice, as Patent Solicitors. Of course we can say nothing about them at present. At some future time the attention of the public will be called to their importance.

Two weeks since we made allusion to a new Amalgamator recently invented by Mr. HOWLAND, of the Miners' Foundry in this city. This machine consists of a hollow, stationary, iron drum, with a fan-wheel, having each arm or fan perforated with numerous holes, revolving within the drum at about 350 revolutions a minute. The pulp, or ore, after being first quite finely pulverised, is put into the machine through an opening at the top of the drum, and is then beaten and battered about, and forced through the little holes in the pan, until it is further reduced to an impalpable powder, and thoroughly amalgamated the while. The "process" employed is a combination of the Frieberg, Patio, and several others, and is in short and in fact an improvement in both the manner and speed of the Frieberg barrel process. Quite a number of practical silver ore workers have examined the machine, seen its workings—at the Foundry—and all, we believe, express faith in its success. A small machine may be seen in operation at the above mentioned Foundry, where they are also constructing one of large dimensions, suitable for the heaviest milling operations.

#### More Machinery for Mexico.

The Sunny South is now taking on board a set of machinery for the El Pecacho (The Peak) Gold and Silver Mining Company, located in the San Antonio Mining District, Lower California, and about 20 miles back from Ventana Bay. The proprietors of this mine are all citizens of Nevada County, where they have filed their papers of incorporation. E. H. Gaylord, of Nevada, is Secretary of the Company, and W. W. Cozzens, President. Charley Barker, one of the pioneers of that County, and an estimable gentleman, withal, is the general Agent of the Company. The machinery has been constructed in this city, under his direction; Palmer, Hanscom & Co., of the Golden State Foundry, being the Contractors. The wood work of the Battery, which, for the present, is but a small one has been constructed at the shop of Mr. E. O. Hunt, on Jessie St., and is a very substantial piece of work. The locality of the Company's Mine is one of the richest in Lower California, and we shall be most happy to chronicle their complete success.

**COPPER CONCENTRATING MACHINERY.**—A splendid, new 40-horse power Engine, from Donahue's Foundry, will be shipped, to-day or to-morrow, designed to drive the Concentrating Works now in process of erection on the Keystone Copper Mine—the western extension of the Union. A large number of mechanics are now engaged in getting up the machinery at the mine.

We notice a statement in a paper published in this city, to the effect that a gentleman at Mokelumne Hill has invent-

ed a machine for concentrating the ores of copper, which we understand, is operated upon the principle of the common gold sluice. Such machinery will be found impracticable when applied to copper. The specific gravity of copper is so much less than that of gold, that a principle which will work most advantageously in the latter metal, will be found entirely useless when applied to the former. The business of concentrating copper ores, though simple in its process, is one of the most difficult of the arts of mining to carry into actual practice, and requires infinitely more skill and attention than the usual processes for separating gold from its sands.

#### A New Work—Important to all Mining Companies.

Wm. A. Andrews & Co., a new firm in New York, who propose to open a Pacific Mining Agency in that city, are preparing a work to be issued about the last of July, embracing a synoptical statement of all Mining Co's in this State and the adjoining Territories. It will be published in pamphlet form, and 50,000 copies distributed, gratis, in the Eastern States, with the intention of bringing Pacific Mining Stocks more particularly to notice in the East, for investment and information of the mass of the people, outside of the leading capitalists of New York and Eastern cities. Such companies as are prominent before the public, and those whose prospects are deemed worthy, will be embraced in the 1st Volume. A 2nd Volume will be issued to include all new companies formed subsequent to the compilation of the 1st. An opportunity will be offered to advertisers, for a few outside pages in the work. MR. LEON HARNETT is Advertising Agent, and Mr. J. A. Woodson, San Francisco Corresponding Agent, of whom further information can be had.

All Companies upon whom the Agents have not called, will please address us as above, and answer, as full as may be, the following questions:—

1. Name of Company.
2. When discovered.
3. Where located.
4. When incorporated, and where.
5. Extent of Claim.
6. Capital Stock.
7. No. of Shares.
8. Assay per ton: Gold, Silver, and Copper.
9. President and Secretary, Board of Trust's.
10. Location of Office.
11. Such additional information as may not be

embraced in answers to the foregoing interrogatories.

Note.—Specimens of Ore requested, labeled, for reference in Cabinet of New York Office.

W. A. ANDREWS & Co.,  
Pacific Mining Stock Agents, New York.

**TO COPPER ORE SELLERS.**—Martin & Co, at their Office, 224 Montgomery St., are prepared to contract for the purchase of copper ores, assaying from eight per cent. and upward to the ton. They will make advances, etc., when desired. See their Advertisement.

**IMPORTANT SILVER DISCOVERIES** are reported to have recently been made on the West bank of Lake Bigler. A town site has been laid off, mill privileges taken up, etc.



## OUR MECHANICAL INDUSTRY.

San Francisco is destined to become the Workshop, as well as the Commercial Centre of the Pacific Coast. In addition to the seven or eight Foundries now in operation in this city, all of which are conducted by wealthy capitalists and experienced mechanics, we also find, scattered here and there, numerous Machine Shops of less pretensions dimensions, but where employees and managers are equally as well skilled, as any in the city; and many of whom, no doubt, in the future growth of our metropolis, are destined to enlarge their field of operations until, by gradual advances, they reach the point of first class establishments. Among the several establishments of this class which have already found a place in our note book, for special notice, is that of

E. T. STEEN'S MACHINE SHOP,

No. 33, Fremont Street. Mr. S. is at the present time engaged in the manufacture and sale of several new and useful articles of machinery, which are fast finding favor among those engaged in general mechanical operations.

One of the most useful of these articles is "Reynolds' Patent Cut-off and Governor for Steam Engines." Among all the various contrivances for reserving power in the application of steam, by regulating the quantity used to the exact necessity of the moment, that above named appears to be the most perfect, prompt and reliable. To saw mills, printing presses and, indeed, all machinery where the work to be accomplished is very irregular in its requirement of power, one of these machines will effect a saving of from 20 to 60 per cent. of fuel. A large number of these machines are now in use in California and Nevada Territory.

MR. STEEN has himself invented a machine of this description, which he also manufactures and has for sale. His modesty does not allow him to say much of his own invention, but it will speak for itself and may be seen at the Golden State Foundry and at the Stone Breaker, at the foot of Market St.

Another very useful economiser of fuel and power in the use of steam is "Clark's Steam and Fire Regulator, which regulates the draft or blast of the furnace by the pressure of steam in the boiler. This is quite a novel as well as useful invention, as will be readily seen on examination of the machine in use, or by a little reflection upon what such a machine properly constructed, might accomplish.

MR. STEEN also manufactures "Ingersol's Patent Drill Braces." If any person is desirous to learn the value of this recent invention let him go through the Machine Shops on First St., or merely notice the work going on in the street and on the sidewalk in front of most of those establishments. Notice a workman yonder, with one of the old fashioned racket-drills, with the slow clatching motion confined to one direction, and every second motion entirely lost to gain leverage. Now go on a little further and see that man with one of Ingersol's Patent Drills. The motion of the handle is not confined to any particular direction, and every movement, in whatever direction it is made, turns the drill and eats into the iron. To us, the use of this new instrument appears equal to a saving of from one quarter to one half in time—an important point in an economical view, at California prices of labor.

MR. STEEN has also introduced into this State, an invention of especial importance to persons using steam in most localities here. There are few places in California where pure water can be obtained for making steam. The numerous mineral substances contained in the waters of this State, cause much annoyance by their tendency to produce scale in boilers. "Blowing off" at frequent intervals, in many cases fails to keep the boilers in good condition. MR. STEEN is selling an "Anti Incrustation Powder," which is said to be a sure remedy against this annoyance. This powder has been in use at the East for eight years, and is being very generally introduced there, and working its way into use in this State. Reference, as to its utility, is made to the Sugar Refinery in this city, and to L. A. Booth & Co. at Virginia City, also to others.

We have made this extended notice not so much for a puff for MR. STEEN, as to call the attention of our machinists and mill men to the valuable improvements to which reference has been made. MR. S. properly appreciates the advantages of advertising, and displays excellent judgment in

—ecting his medium. Our rambles among the workshops of the city, however, will not be confined exclusively to those who may, for the time being, see fit, or think it for their interest to extend patronage to us. All alike will be visited and noticed in turn; and while we would not importune any one for their patronage, we shall ever be happy to receive and acknowledge favors from all. We hope, as time progresses, to be able to make the PRESS more and more useful to our mechanical as well as mining interest.

## NOTES OF A TRIP TO SLATE RANGE VIA LOS ANGELES AND EL-PASO. NO. 2.

THURSDAY, APRIL 9TH. Left Mayhew's about 10 A. M. and traveled over a portion of the immense plain lying between Los Angeles and the Ocean.

The land is not all level, though it looks so at a distance. We found some valleys from fifty to one hundred feet in depth, gradually descending and rising, but no water, no feed for the immense number of horses and cattle, wandering over it. In the bottom of one valley we found a dry river bed which had been cut out by the great rains of '61 and '62, about fifteen feet in depth, the sides of which were steeper than an ordinary cottage roof. Here we thought it impossible for teams to descend, but our leader, Captain Colby, drove down the first five yoke, then ordered a halt, locked both hind wheels, and the wheel cattle went over without injury to the wagon, but a piece of machinery which protruded over the top of the right wagon box, struck into the back of the rear ox and gouged him fearfully. Poor fellow! We only made about six miles this day and at 3 P. M. camped for the night. I found the weather very different on these plains from what it was in Los Angeles. I had thrown aside my under clothing and expected to find it growing warmer, rather than colder as I advanced. It was a sad mistake, and I suffered from cold nearly all the time. The nights were very cold and I crept into the covered wagon and made up my bed on the sacks of corn and barley bound to feed the mules in Slate Range.

APR. 10. Started at 8 A. M. and passed through a very extensive ranch, called Cowangos, a beautiful valley, but no feed to be seen, and was told that a little could be found in the valleys at the foot of the mountains 8 to 12 miles distant; but all agreed that there would be terrible suffering this season among the stock in this county.

About this time we came in sight of the San Fernando Mission buildings. They consist of three great adobe blocks, one for a church and the others for dwellings.

This must have been a very extensive establishment at one time. Now it seems deserted and is all going to ruins. Near the buildings, are two very large orchards, enclosed by adobe walls about 8 feet high, and 8 miles in circumference, in many places broken down by the rains and cattle.

I learn that the mission is owned and occupied by Andreas Pico (brother of Ex. Gov. Pico at Los Angeles,) his son and son-in-law and their families.

I heard from one of our teamsters that in Sept. one could get a great variety of fruit there, but I could see only the olive tree, and the immense cactus which lined the walls, and also grew in great patches in various parts of gardens. This cactus, little specimens of which are trained so carefully in our city gardens and hot houses, here grows fourteen feet high, the base being nearly a foot through, and those immense, flat, green heads shoot out in all directions, wedged so closely that only the smallest animals can move through them. The ripe fruit upon this plant is highly prized by the natives, and is brought into Los Angeles and sold in large quantities.

Camped near by a tile-roofed house near to the entrance to the San Fernando Cañon.

APR. 11. Started at 9 A. M. and soon entered the Cañon, which resembled a great valley at first, but soon began to contract its limits and after an hour or so, we began to ascend quite moderately, and about noon came to the summit, and a steeper, sharper pitch for teams to pass I never saw. For about 200 feet the ascent is as great as can possibly be overcome by wheels. Here the teams were doubled, making twelve yoke on each wagon, and every one of them strained every muscle to the utmost, as well as the drivers, who poured out yells and curses and swung and cracked their great Pike County whips, with all the vim in their constitutions. After a few moments of

terrible excitement the wagon was safely landed in a deep cut of 50 feet on the summit. This work has been done by Lieut. Beal, who has the contract to improve this road and put up toll gates. He has already done a good deal upon it and will be able to continue doing so for years. The descent of the summit is not so laborious but more perilous as there is great danger of the wagon sliding down over the road if not the cattle. With both wheels locked the wagon slides down as rapidly as the oxen can be kept out of the way, the wheelers holding back their very best and frequently getting their ears between the yoke and their horns and cutting them dreadfully, so that the blood runs down their necks and drops to the ground. At 1 P. M. we camped at the Fountain House, a lovely valley where a large stream of pure water gushes out of the hill and fresh grass grows all around for the cattle. We here found ourselves only 31 miles from Los Angeles, after traveling four days. This must appear to any person as slow progress, but teamsters are obliged to give their cattle every opportunity to gain strength in the first part of the trip in order to get over the latter portion, which becomes more desolate and barren as they proceed.

12TH. We made sixteen miles this day and camped in San Francisco Cañon—as we passed along the road, we found the California hare or jackass rabbit very plenty, as many as ten to fifteen in sight nearly all the time within gun shot, and flocks of quails starting up in every direction. The only vegetation thus far is a dry tea bush, and the greasewood which grows in scattering bunches 10 to 30 feet apart all over the country, and occasionally the tree cactus which grows about 10 feet high and is armed with sharp pointed bayonet leaves all over the trunk and limbs and then forms in bunches as large as a man's head, with the points standing out in every direction.

We have met Mr. H. F. W. Hoffman, clerk of J. P. H. Wentworth, Indian Agent, on his return from Owen's River Reservation, with some women, fleeing, as we understand from the Indian troubles in that quarter.

13TH. Remained all day at this camp.

14TH. Started at 8 A. M. and about noon passed Maj. Gordon's Hotel, a commodious adobe house, formerly a station on the Overland Stage Route. Stopped but a few moments and passed on a couple of miles to camp. On our way up the Cañon we were shown the narrow gulch where a man and his family were caught, in the month of August last, by a water spout which overwhelmed the entire party drowned one woman and three oxen and completely wrecked everything. The bones of the cattle were there as a lasting memorial of the sad wreck.

This Cañon is about 25 miles in length, very gradually ascending nearly all the way, and the creek which runs through it crosses the road 92 times between Maj. Gordon's and the mouth of the Cañon, where it sinks, and comes up again about three miles out and then runs into the Santa Clara.

We here met deer on the steep mountain sides and one of our party tried to bring one down with his rifle, but did not succeed. A shot gun is a most desirable weapon on this trip, as with it, there is no occasion to want for fresh game.

15TH. Left camp near Gordon's, passed out of the Cañon and in three hours reached Elizabeth Lake at 11 A. M. Here is good feed and plenty of water, so we camped and stayed over night. At this point there is always a still breeze blowing and generally very cold at all seasons. We were obliged to tie on our hats, and secure blankets around us to keep any way comfortable, as the wind would blow on fire nearly out and when we piled on the wood which we had packed from the Cañon, it would blow the flame flat on the ground for 10 or fifteen feet. A most uncomfortable place.

16TH. Left Elizabeth Lake at 7 o'clock, passed over quite a hill and came upon the great Mohave Dessert. This seems to be endless in extent, like a mighty ocean, lying motionless beyond the reach of vision, with a bright mountain rising occasionally from the plain, like islands. As I passed the summit, met a traveler on horseback, who told me he had seen a fresh grizzly track in the road and I had better keep a sharp look out. I did so but had not the pleasure of meeting his honor, and as I was not armed, did not complain of the sight.

We passed on this desert, the cold wind and rain from



## Mining and Scientific Press.

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal., at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - - Proprietors

## Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. SKETCHING and ELECTROTYPING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Mills, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. PATRONS will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

## To Printers.

AN INTEREST in one of the most flourishing and best paying Newspapers in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

## MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR: VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers.—Four Dollars per annum.

## Club Rates.

Five Copies for Six Months, \$16.  
Ten Copies for Six Months, \$18.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

## EWER &amp; SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## Our Mint, its Rules, Charges and Operations.

## For parting silver from gold when gold

is below 300-1000ths. fine ..... 3cts per oz.  
" from 30-100ths. to 750-1000ths fine. 7 cts " " oz.  
" " 750-1000ths to 950-1000ths " 14 cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " " " "

## DEPOSITS FOR FINE BARS.

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.

and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphureted ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector. These articles will be published under the head of "THE MINER'S LABORATORY," and will be found of great value to the mining public. [Mining and Scientific Press, April 20.]

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so for meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

the mountains striking us on our backs for three hours, arrived at Willow Springs about 2 P. M., stayed a couple of hours to rest and water the cattle, and at midnight camped at Oak Creek. This is a beautiful stream of pure water tumbling down the gulch, forming a good mill site every few rods, and plenty of oaks and pines on the hill sides and alluvials in the bottom. Here is good feed and plenty of it, so we remained till Sunday the 19th, 2 P. M., when we topped out our wagon with good sweet hay at \$40 per ton, for the use of the cattle from Cane Springs, El Paso District, Slate Range, a distance of 60 miles and back. While at Oak Creek parties came in from Owens River and reported that all the Slate Rangers had left and gone in to Visalia, from fear of Indians, and also the Miners from the El Paso District; but we concluded to go through and take our chances. Drove on three hours and camped at the sink of the Lechapa.

APR. 20. Drove from 9 A. M. to 11 P. M., rested one hour at Desert Springs, pushed on to Cane Springs, 33 miles from Oak Creek.

While passing over the Desert we frequently saw at a distance small herds of antelope, and the hare were as plenty as ever, but few quails.

At Desert Springs we found the only house deserted, as the owner was too much out of health to remain while we were beyond him were hastening into the settlement.

21st. Started at 5 P. M. and arrived at Mesquit Springs 11 o'clock. This is the central location for the El Paso mines, which are now attracting so much attention. We found remaining here four or five hardy miners who had no fear about them, and who laughed at the idea of running away from the Indians. They had all given Slate Range a trial and after a month or more of prospecting here had come to the conclusion, that this District had greatly the advantage over Slate Range in every respect. The mountains are full of metals, water is plenty, fuel within twenty-five miles and perhaps within fifteen, and supplies are obtained from Los Angeles at about one half the time and labor and about one half the cost.

22. The teams remaining here till toward night we rammed over the hills, examining some of the rich leads, and specimens of others and came to the conclusion that we could take off our freight, stop here and prospect for the present. So here we are settled and will report the condition of things as soon as we get acquainted. C. W. T.

A GRAND UNION PROMENADE CONCERT will be given by the Temperance Societies of San Francisco, in aid of E. H. T. SLIFER, on Thursday Evening, June 11, 1863, at Matt's Hall. Ticket, (admitting Gentleman and Lady,) one Dollar.

## TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metalliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; the rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel,



## THE MINERS' LABORATORY.—NO. VI.

## HOW TO PROVE THE PRESENCE OF COPPER IN MINERALS AND OTHER SUBSTANCES.

In order to proceed in a legitimate manner, to discover the presence of copper in minerals and other matrixes, it is necessary that the miner should be made somewhat acquainted with the chemical tests for pure copper and in order that he may be made so acquainted, we will set before him some few of the prominent ores and how to obtain them.

Dissolve about  $\frac{1}{2}$  oz of the sulphate of copper (blue vitriol) in about 6 oz. of water, divide the solution into six parts and proceed as follows:—

To No. 1, add a small quantity of the sulphide of ammonium which will immediately give you a black precipitate of the sulphide of copper.

To No. 2, add a solution of soda, which will immediately throw down the hydrated oxide of copper in the form of a green powder, which will become black on boiling.

To No. 3, add a drop or two of the solution of ferrocyanide of potassium, this will give no precipitate, but will give your solution a mahogany color.

To No. 4, add ammonia in excess and you will obtain a very deep blue colored solution.

In No. 5, place a strip of bright iron or zinc and a few drops of hydrochloric acid (muriatic acid) and the copper will be deposited in a metallic state on the iron or zinc.

It would be well that those prospecting for copper should make themselves perfectly familiar with the above tests.

Having given you a few of the most reliable reactions of copper with reagents. I will now describe to you how to prove the presence of copper in minerals, &c. The substance to be examined for copper must in the first place be reduced to very fine powder and if insoluble in water must be dissolved, if green color in hydrochloric acid, and if black or yellow in nitric acid. Vaporate the excess of acid after complete solution and dilute with 4 to 6 times its bulk of water and divide it into two parts. To No. 1, add ammonia in excess and you will obtain a deep blue solution, if copper is present. It is very probable the solution will be muddy at first—allow the solid matter to subside in order that you may examine the solution.

In No. 2, you must place a strip of bright iron or zinc—if copper is present it will be deposited in the metallic state upon the zinc or copper. With these two tests, one confirming the other, you cannot fail to discover the presence of copper.

## APPARATUS AND CHEMICALS REQUIRED FOR CONDUCTING THE ABOVE TESTS.

- 6 Glass Test Tubes.
- 1 Small Glass Funnel.
- 1 Spirit Lamp.
- 1 package of Filtering Paper.
- $\frac{1}{2}$  lb. of Ammonia— $\frac{1}{2}$  lb. of Nitric Acid.
- $\frac{1}{2}$  lb. of Hydrochloric Acid—1 pint of Alcohol.

The value of the whole would not exceed \$5 00.

## THE COMPARATIVE VALUE OF SOME OF THE MOST COMMON OF THE ORES OF COPPER.

*Native Copper* generally occurs almost pure, and in almost every conceivable form, as massive, granular, siliform (thread like), arborescent, in thin lamina, etc. When found associated with other metals, such as silver, for instance, the two metals usually occur in juxtaposition, simply, and not combined, a condition which they readily assume when melted together in the crucible.

*Sulphuret of copper* is a very rich ore, yielding copper 76.5; Sulphur 23; and iron .5.

*Red Oxide of Copper* is a very rare and rich ore. Very little, so far as we have learned, has yet been found in this State. When free from earthy impurities its yield is 88 @ 91 of copper, and 9 @ 12 of oxygen.

*The Black Oxide of Copper*, in its pure state yields from 70 @ 80 per cent. of copper. Both the black and red oxide yields readily in the reducing flame of the blow-pipe a globule of copper.

*Variogated Copper Ore* (Peacock Ore) gives 50 @ 56 per cent. of copper, and promises to be quite common in the mines of this State.

*Copper Glance*, or *Reddishite* yields from 70 @ 79 per cent. of copper, when quite pure, and in that condition may be readily melted in the ordinary flame of a candle.

It sometimes, though rarely, occurs in connection with Bismuth, when it falls as low as 18 to 20 per cent.

*Antimonial Copper* is neither very common or rich. It yields 20 @ 25 per cent. of copper.

*Green Carbonate of Copper* (Malachite) in its pure state contains 57 per cent. of copper.

*Blue Carbonate of Copper* is usually a richer ore than the green and contains from 65 @ 70 per cent. of copper.

*Gray Copper*, is a very rich and promises to become a quite common ore, in this State. Its yield of copper is from 40 @ 50 per cent. This ore often contains as high as ten per cent. of silver, and sometimes a small quantity of quicksilver.

*Copper Pyrites* is the most abundant of the ores of copper and usually about the poorest. Its yield is greatly affected by the presence of iron and varies from 12 to 30 per cent—rarely, however, reaching 25.

If tin is ever found associated with Copper in California, it will probably be with this description of ore. When so found it is usually in about the following proportions:—Copper 30; tin 26; iron 14; sulphur 30.

## INDICATIONS OF TIN PYRITES—ASSOCIATED WITH COPPER.

*Tin Pyrites* occurs massive, like copper; its lustre is metallic, with streak black; color from steel-gray to iron-black, sometimes presenting a bluish tarnish, with an uneven fracture. When heated in an open tube it gives off sulphurous fumes, with a slight sublimate of the oxide of tin. On charcoal, with the blow-pipe, the sulphur is first expelled, after which a dark scoriaceous (pertaining to dross, like the dross or scoria of metals) globule is obtained. The charcoal will also be coated with the oxide of tin. With soda, a globule of impure copper is obtained.

This species of pyrites may be more confidently looked for in a granite rather than a slate region. Copper miners will do well to keep a good lookout for this mineral, as, if found it will be a valuable ore.

*Arsenical Copper* (Domeykite) which may be known by its reniform and botryoidal appearance, (veniform, having the shape or form of kidneys; botryoidal, shaped like a bunch of grapes) is a very rich, though somewhat rare, ore. It yields, when pure, about 70 per cent. of copper, and 30 of arsenic. Its composition sometimes varies so as to bring the copper as low as 60, with arsenic 20, and 20 parts of iron and sulphur.

*Sulphate of Copper* yields about 25 per cent. of metal, and occurs irregular in shape and in three-sided crystals, with a glossy lustre, approaching to sky-blue, in lustre. This mineral is often found dissolved in the water which issues from the mine. The copper from these waters is obtained by precipitation with iron. At a mine in Wicklow, 500 tons of iron were laid at one time, in the pits into which the water was collected, and in about twelve months, this iron was all decomposed or dissolved, and each ton of iron was found to have deposited two and a half tons of a reddish mud, which was an oxide of copper, and which upon proper treatment yielded 16 cwt of pure copper to each ton of oxide.

**COPPER ORE.**—The Steamer Panama, which arrived here from the North last week, brought down several tons of very rich ore from the Del Norte Copper region. The Mammoth Company sent a quantity of sulphurets of extraordinary richness. The Evoca sent about 100 bags of rich oxides. The Mines of the Del Norte region are being rapidly developed, and are promising to be exceeding rich in both quality and quantity of ore.

At last reports there were some 500 tons of copper at Stockton, on its way to this city for shipment East. This ore is from the Napoleon, Union, Keystone and other mines in Calaveras. The amount of copper ore now coming forward is beginning to be quite important—although but a small portion of that which is being raised.

**LAKE BIGLER.**—This beautiful sheet of water covers an area of about 300 square miles, and is 6,000 feet above the level of the sea. It is engulfed between two ridges of mountains which form on either side some of the highest peaks of the Sierras. The central portion of this lake has recently been sounded to the depth of 2,400 without finding bottom.

## NEW MAP OF THE UNITED STATES.

We have now hanging up in our office the most accurate and complete Map of the United States, which has ever been published. In size it is about 40 by 50 inches, and contains the names of 300,000 Towns and 31,000 Railroad Stations, all distinctly lettered. Every Railroad in the United States and the Canadas, with every Station established prior to June 1862, is clearly and distinctly laid down on this Map, as well as all the principal Rivers, Fortifications, Battlegrounds, etc., up to the above date. The Map is divided off and colored in Counties, and has been prepared at great cost from actual surveys. The Maps prepared by Mr. Lloyd, are used by the Officers of the Army and Navy everywhere, throughout the Union lines, under the sanction of the Secretaries of War and the Navy. So confident are the publishers of its accuracy that the Map bears upon its face the following note, distinctly printed in large type:—"Any one finding an error in this Map will be entitled to a copy, gratis, by writing to the publisher." The Map is sold only by Canvassers. An Agent is now canvassing the City for its sale. No Dwelling, Office, or Counting-Room should be without a copy. This Map is published by J. T. Lloyd, and should not be confounded with an inferior publication by H. H. Lloyd.

**PROSPECTING MACHINERY.**—Quartz Miners and Prospectors at the mines, desirous of having their ores practically tested in this city, can have every facility for doing so by forwarding them to Mr. Williams' Reduction Works, near the Miners' Foundry, at 261 First Street. Mr. Williams has several machines in operation at his establishment, among which are Pond's Crusher, Kimball & Ellis' Stamp Mill, Howland's Grinder for Quartz Tailings, etc. The quartz thus reduced can be carefully amalgamated in Wheeler's Pans, or by other processes, as may be desired.

## GENERAL MINING STOCK REPORT.

REPORT OF BIDS  
At the San Francisco Mining Stock Board,  
For the week ending June 8, 1863.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,500	12	\$300	—	—	2875	2400	—	—
Gould & Curry	4,800	4	300	4050	4175	4200	4300	4200	4400
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	5,600	4	300	450	450	455	465	465	465
Potosi	2,800	2	500	500	500	—	400	450	450
Hale & Norcross	80	12	500	—	917½	900	900	850	850
Sierra Nevada	3,000	1	500	51	55	55	50	52½	55
Dancy	8,000	500	345	340	340	340	300	330	330
Burning Moscow	4,800	2	100	130	140	145	153	160	142
North Potosi	2,200	1	300	35	35	35½	35	—	—
Rogers, F. D.	3,000	1	250	—	—	—	—	—	—
Meredith	7,200	2	125	25	25	—	—	—	—
Charles Caney	1,800	1	50	—	—	—	60	—	—
Sacramento	1,800	1	500	65	—	—	62½	70	60
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Sage	800	1	—	2500	—	2500	—	2575	2500
Iowa	—	—	—	—	105	109	100	—	—
El Dorado	—	—	—	—	—	72½	75	75	71
Norton	1,600	1	—	12	14½	—	14½	14	14
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Barrick	—	—	—	26	26	26	26½	26	—
Atrich	—	—	—	6	—	6	—	—	—
Brennan	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel	10,000	1	100	—	2½	3 75	—	4	4
Mount Davidson	10,000	1	200	—	—	—	—	3½	3½
Pride of the West	—	—	—	150	145	145	150	143	—
G. G. Quarz M. Co.	—	—	—	250	—	260	—	—	260
Imperial	—	—	—	465	460	—	475	—	465
<b>GENERAL STOCKS.</b>									
Wells	2,600	1	600	287½	200	270	250	245	205
Antelope	1,200	1	500	—	100	—	—	—	—
Esmeralda	1,600	1	1000	—	—	20	—	22	—
Real Del Monte	4,400	1	400	75	95	—	—	100	—
Etta	1,200	1	100	—	—	—	—	—	—
Utah	1,600	1	250	—	80	80	75	75	—
Silver Hill	3,000	1	500	43	50	—	45	—	44
Nevada	1,200	1	250	—	—	—	25	22	—
Federal Hope	—	—	—	—	—	—	—	—	—
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	30	—	—	—
Falls of Clyde	—	—	—	—	—	6	6	7	8
Sunbeam, S. W. ex.	—	—	—	40	—	—	—	—	—
Bamboo	600	1	500	40	40	40	—	40	—
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	18	18	18	18	17	16
Coso	1,600	1	600	—	—	—	—	—	—
Willow Springs	2,700	1	100	3	9½	—	9	9½	—
Empire	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	—	1000	—	—	—	—	—	—
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Josephine	2,700	1	600	100	80	100	—	—	120
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	—	—	—	6	5	5	4½	5	4½
Utica	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	30	35	—	30	—	—



## TRANSACTIONS IN SHARES, FOR THE WEEK.

## MONDAY'S SALES.

Wd West, b30	315 00	20 Buena Ventura	1 00
do.....b30	310 00	10 Silver Hill...	50 00
do.....b30	300 00	5 Yellow Jacket	825 00
2 Daney.....	345 00	50 Josephine b30	20 00
0 do.....b30	365 00	25 Burnside s10	25 00
5 Madison.....	25 00	10 Norton.....	15 00
0 B Moscow b30	150 00	20 Lucerne.....	6 00
0 do.....	154 00	10 Hale & Norcross	920 00
0 Chas Caney...	95 00		

## TUESDAY'S SALES.

4 Chollar.....	460 00	10 do.....	35 00
0 do.....	450 00	30 Daney.....	340 00
5 Sierra Nevada.	53 00	40 do.....b30	357 50
0 Burnside.....	25 00	16 Cha's Cany...	90 00
0 do.....	26 00	32 Madison.....	23 00
0 Wide West b30	300 00	25 do.....	25 00
5 do.....	280 00	5 do.....b30	26 00
2 do.....r w,	285 00	20 Burning Moscow	140 00
0 do.....	250 00	20 do.....b30	150 00
0 Hale & Norcross		10 Josephine.....	18 00
buyer 60 days	960 00	20 San Francisco	50 00
6 Hale & Norcross	920 00	10 El Dorado.....	85 00
5 Iowa.....	105 00	15 do.....	90 00
5 North Potosi..	36 00	10 Rhodes dig b30	37 50

## WEDNESDAY'S SALES.

5 Napoleon...30d	100 00	118 Cal Smltg Wrks	3 00
0 Burnside.....	26 00	15 Coso.....	21 00
25 do.....	25 00	8 Melones.....	100 00
2 Utah.....	80 00	10 Esmeralda.....	22 00
0 Ophir...b30	2500 00	20 Pond.....	37 50
0 Burning Moscow	135 00	20 do.....	35 00
0 do.....b30	155 00	5 Norton.....	14 00
0 do.....	142 50	50 do.....	14 55
2 do.....	145 00	50 do.....	14 50
0 do.....b30	160 00	25 do.....	14 75
0 do.....	147 50	25 Bodie Bluff...	4 00
0 do.....	150 00	10 Buckeye.....	15 00
0 do.....b30	160 00	50 St. Louis.....	2 00
0 Madison...b30	25 00	50 N. Potosi...b30	40 00
13 do.....	25 00	20 Chollar.....	465 00
9 Wide West...	250 00	40 do.....s30	460 00
20 do.....b30	280 00	07 Josephine.....	18 00

## THURSDAY'S SALES.

30 Burning Moscow	150 00	10 do.....	25 00
20 do.....b30	165 00	20 do.....	20 00
20 do.....	155 00	20 do.....	22 50
20 do.....	152 50	10 do.....	24 00
10 do.....b30	165 00	10 do.....	23 50
20 do.....	160 00	5 Melones.....	110 00
20 do.....b30	175 00	5 Pride of the West	152 50
50 Norton.....	14 00	5 Savage...b30	2,675 00
25 Burnside.....	25 00	10 Wide West...	260 00
25 do.....	25 50	12 do.....	257 50
40 do.....	22 50	10 do.....b30	260 00
40 do.....	22 00	25 Nevada.....	25 00
3 Potosi.....	580 00	10 Hale & Norcross	925 00
14 do.....	595 00	30 Josephine...b30	20 00
21 Coso.....	22 00	22 Ophir.....	2,425 00
10 Lucerne.....	6 00	12 do.....	2,400 00
15 Bamboo...b30	55 00	12 do.....	1,412 50
40 Golden Cross...	8 00	15 Madison.....	25 00
20 Pond.....b30	40 00	20 Chollar.....	465 00

## FRIDAY'S SALES.

10 Burnside.....	25 00	10 do.....	160 00
5 do.....	25 50	20 do.....	157 50
12 Golden Cross..	10 00	20 do.....b30	170 00
60 Madison.....	25 00	10 do.....b30	172 50
25 do.....b30	28 00	5 Wide West...	245 00
10 Pond.....	25 00	10 Melones.....	110 50
10 Burning Moscow	165 00	50 Reese River...	2 00
10 do.....b30	180 00	2 Esmeralda.....	23 00
39 do.....	162 50	10 North Ophir...	18 00
29 do.....	164 00	5 Pride of the West	136 00
39 do.....ab30	175 00		

## SATURDAY'S SALES.

40 Daney.....	346 00	5 Wide West...	235 00
40 do.....b30	355 00	3 do.....	220 00
10 Burn'g Moscow	150 00	10 do.....	207 50
40 do.....	137 50	31 do.....	205 00
30 do.....b30	160 00	5 do.....	210 00
25 do.....	145 50	25 Burnside.....	25 00
40 do.....	145 00	10 do.....	22 00
45 do.....b40	155 00	20 El Dorado...	71 00
25 do.....	144 00	25 do.....	14 75
5 Pride of the West	122 1/2	100 St. Louis...b30	2 50
5 do.....b30	135 00	2 Potosi.....	600 00
00 Cedar Hill Tun.	4 00	15 Krutch & Baker	12 50

## REMARKS

The limited transactions in the Mining Share Market, heretofore noticed, still continue. It is a gratifying fact, however, that this cessation in de-

mand is no indication of a want of confidence in stocks of heretofore accepted value. Stocks of well ascertained merits fully maintain their position, and the shares of progressive mines of this description, keep pace, in their advance with developments at the mines. The present reaction, has thus far, had no effect to diminish confidence in legitimate mining operations anywhere. Dividend paying mines are becoming regulated by the dividends which they pay, and progressive mines are estimated by their actual developments, while fancy stocks are held mostly in abeyance, or, when dealt in, regulated by fancy prices alone. This condition of the market, has put a pretty effectual check upon speculative operations, to the lack of which, alone, may be attributed whatever exists of present inactivity.

Ophir shares remain at about uniform rates by reason of the continuance of small dividends. Another dividend of \$48 to the foot was declared by this Company, on Saturday, payable to-morrow.

The recent heavy payments of the company to perfect their title and to acquire additional ground have been the cause of their late low rate of dividends, and the important additions now being made to their reduction works, by purchase and construction will probably continue low dividends for some time to come. The stock, however, in most hands remains firm and is held at rates now ruling, on the conviction that its intrinsic value is constantly improving, and that when the additional machinery now in progress of erection shall be put in operation, dividends will advance beyond the highest limits of the past, and carry up the stock to a figure proportionally in advance of past rates.

Gould & Curry, by reason of its high dividends, and the confident anticipation of their further improvement is largely sought after at constantly improving rates. Holders are sanguine of \$150 per foot for future dividends.

The Empire Mill and Mining Company situated on Gold Hill, N. T., is a recent incorporation with a capital of \$1,000,000, divided into 1200 shares, and holding 75 feet of ground in Gold Hill proper, with a 21 stamp mill, ready. The first appearance of their stock in this market is noted by Sanborn's Circular of Saturday last, as selling at \$1,000. The Company was organized April 1st, last, and has paid 3 per cent. per month dividends, on their capital stock since that time.

Eight and a half feet in the Mexican Claim was recently sold to New York parties, at the rate of \$8,000 per foot. This covers all the stock in this claim that can be had at any price, and concentrates the whole in a few hands. This is the highest price ever paid for mining ground, and is no doubt a splendid investment at that.

The Grass Valley Company has recently instituted a suit against the Potosi, with what is considered, by its friends, as a formidable array of evidence in support of its title, and it has rapidly advanced of late and may now be quoted in this market at from \$80 to \$100, although our correspondent at Virginia City quotes it at half these figures in that market. There is but very little of the stock in the market.

Some fluctuations during the past week, will be noted, by reference to our reports of the Stock Board, and General Report of Sales, for the week.

We have arranged our "Report of Sales," in such a manner as to convey to the reader a very correct idea of the pulse of the market during the week, exhibiting the rise and fall of the various stock, as these movements take place from day to day. We shall hereafter continue that arrangement.

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, June 4, 1863.

Virginia Mining District.		Gold Hill District.	
	Bid. Ask'd		Bid. Ask'd
Ashland.....	\$ 9 10	Sierra Nevada.....	\$ 55 60
Allen.....	90 100	Sacramento.....	70 75
Aitchison.....	150 —	Shamrock.....	18 18
Alturas.....	5 7	Texas.....	8 10
Belvidere.....	35 40	Union.....	100 —
Birdsall.....	30 35	U. S. Tunnel.....	5 6
Birdsall and Golden Era.....	35 40	Utah.....	75 80
Burnside.....	18 20	Old Virginia.....	250 —
Burning Moscow.....	145 150	Washington.....	5 —
Beach-Paxton.....	100 165	York.....	8 —
Bloomington.....	5 7	Zouave.....	17 20
Crescent (Buchanan).....	250 —		
Cedar Hill Tunnel.....	5 —		
Cole.....	15 20		
Consolidated Cedar Hill.....	3 3 1/2		
Durgen.....	3 5		
Empire.....	6 —		
El Dorado.....	85 90		
Fairview.....	200 225		
Grass Valley.....	40 50		
Hazel Green.....	7 —		
Harrison, Virginia Incorp.....	18 25		
Harrison, San, Fran. Incor.....	25 —		
Irving.....	10 —		
Insurance.....	25 30		
Iowa.....	115 120		
Ironides.....	5 6		
Indus.....	10 12		
Keystone.....	25 30		
Konoha.....	8 10		
La Crosse.....	9 10		
Lancaster.....	10 12		
Monte Cristo.....	30 35		
Meredith.....	40 45		
Mr. Davidson.....	5 —		
McBee.....	5 —		
Milton.....	60 65		
Monarch.....	6 —		
Madison.....	18 20		
Mohegan.....	10 12		
Norton.....	15 20		
Oakland.....	12 15		
Oriental.....	3 1/2 5		
Oscola.....	12 15		
Pride of Washoe.....	20 25		
Peyton.....	40 —		
Poorman.....	100 110		
Perseverance.....	40 40		
Rogers.....	17 20		
Record.....	35 40		
Santa Rita.....	35 —		
Santa Fe.....	35 —		
Sutro.....	15 20		
St. George.....	25 —		

## REMARKS.

Little of moment has transpired in the Virginia M. & N. since the date of our last reference. Trade has been comparatively light, although the disposition to move is quite as apparent as at any time during the Spring. Capital, however, is becoming somewhat more cautious, and funds contentment in less profit than heretofore and in less risk.

Among the fluctuations of the past week in stocks which receive their value in the Virginia market, we may point to the Utah, the Bajazette, the Burnside, the Belvidere, the Birdsall, the Fairview, the Texas, the North America, and a number of claims of value in Gold Hill district. The Burnside is not salable at over \$20, the Belvidere at over \$25, the Birdsall at over \$30, the North America at over \$20, the Texas at over \$7, the Utah at over \$65 @ 70, the Sutor at over \$15. The Fairview has advanced to \$200, the Bullion to \$80 @ 85, the Princess to \$90 @ 95, Hazel Green to \$5, Sacramento to \$70 @ 72, Wm. Penn to \$14 @ 15, Lafayette to \$12 @ 15, Insurance to \$25 @ 30, etc. La Crosse and Madison are marketable at our quotations. The talk of a compromise between the Belcher, Koh-i-noor and, perhaps, the Sinaloa, has created a firmness in these stocks which has almost ruled the two former from the market. Rumors of a compromise between the Yellow Jacket, Princess and Union are again in circulation, but we cannot vouch for their reliability.

No new discoveries of importance have been made during the week, with the exceptions, to our knowledge, of the striking of the Durgen ledge by the Bloomington Co. in Mt. Davidson, the finding of fine looking ore in the Indus, and the improvement of the ore in the El Dorado.

## ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, May 19, 1862.]

	Bid. Ask'd		Bid. Ask'd
Alpine.....	\$4 10	Koeney.....	30 —
Anador.....	5 —	Lave Yauco.....	15 —
Atlantic.....	10 —	Lord Byron.....	7 12
Arcade.....	6 10	La Plata.....	7 1/2 12
Antelope.....	— —	Main Esmeralda.....	45 50
Alturas.....	15 —	Mouroe.....	— —
Elta.....	— —	McKinstry Tunnel Co.....	10 —
Brazili.....	12 20	Monte Christo, Tunnel co.....	40 —
Bodie Hill Consolidated.....	20 —	Mutual Indemnity.....	10 —
Bodie Peak, Bodie District.....	8 —	Mount Brant.....	4 6
Bright Star.....	10 15	Miner Road.....	12 18
Bamboo.....	55 —	Meredith.....	12 18
Bullion (Van Horn Dist.).....	10 —	North Willow Springs.....	60 75
Bodie Bluff, No. 1.....	12 18	New Esmeralda Consol.....	6 —
Bodie Bluff, No. 2.....	5 —	Newton.....	60 —
Banker Hill.....	14 15	Nevada, (Tunnel).....	15 —
Bonaparte, Tunnel comp.....	30 —	Ozark.....	20 —
Caucasian.....	25 —	Old Winnemucca.....	3 6
Climax.....	10 —	Paul Tunnel Co.....	5 —
Crockett.....	60 60	Pacific.....	15 —
Cape.....	5 —	Pond.....	70 —
Davis, consolidation.....	5 —	Pride of Antelope.....	10 15
Durgen.....	— —	Peru (two ft. to the share).....	15 —
Delta.....	8 —	Penny Nevada Tunnel Co.....	4 —
East Essex Exc. Ur.....	12 —	Real Del Monte.....	125 —
Excelsior, Excelsior Dist.....	3 10	Rebecca.....	15 20
Empire.....	28 —	Red, White & Blue.....	20 —
Franklin, Tunnel company.....	10 —	Stanford Tunnel Co.....	10 —
Fallstaff.....	20 —	Scheuchter.....	7 10
Fallstaff, Consolidation.....	4 5	Strawberry.....	20 25
Fraser Hill.....	12 —	Silver Hill.....	65 90
Falls of City.....	9 10	Silver Hill, Bodie District.....	10 —
Great Eastern.....	5 —	St. Louis.....	5 —
General Hooker (Con.).....	10 25	Tuscan.....	3 10
General Jackson.....	13 14	Tiger.....	4 —
Garibaldi.....	35 60	Tucker.....	15 —
Golden Harvest.....	5 —	Tennessee.....	12 25
Golden Cross.....	25 —	Union Tunnel.....	20 30
Governor Seymour.....	92 25	Utah.....	10 10
Golden Age.....	92 45	Ural proper.....	600 —
Great Britain.....	6 9	Ural [extension].....	10 —
"Golden Era" Tunnel Co.....	2 3	William Tell.....	2 1/2
Greenback.....	20 35	Wide West.....	395 —
Hanover.....	10 —	Washington, Tunnel comp.....	15 —
Howard Tunnel Co.....	12 —	Western Summit.....	90 110
Heath.....	\$12 15	X-Ella and Constantinople consolidated.....	1 1/2 —
Herman Consol.....	15 —	Yancey.....	45 60
Hume Check, Excelsior Dis.....	3 5		
Juniata.....	10 18		

## REMARKS

A favorable change has taken place in the Stock Market the past week.

The injunctions in which the Del Monte Consolidated Mining Co. were plaintiffs, on several valuable ledges on Last Chance Hill, having been dissolved, a large amount of work is now going on, and sufficient rock is being taken out to supply one third of the mills in the District.

Several new ledges have recently been struck and a large amount of ground has changed hands in the District, the past few days, at advanced figures.

The Gen. Hooker Lode on Silver Hill is still increasing in richness. The main shaft is now down about 60 feet and the ledge over 5 feet wide. Over 100 tons of rock have been taken out ready for crushing.

The Crittenden Lode on Last Chance Hill is turning out rich rock. The tunnel is now in about 40 feet and the Company are drifting on the ledge which is over 5 feet wide.

The Juniata Lode on Martinez Hill is turning out some of the richest gold bearing rock in the District. The tunnel has struck the main ledge 200 feet below the surface. The ledge is about 6 feet wide. The contractors will now commence drifting on the ledge in both directions and will be able to take out 20 tons per day. The rock assays \$900 per ton.

The Great Britain shaft is now down about 70 feet. The ledge is over 5 feet in width and increasing in richness. The last crushing paid \$40 per ton. The Company have about 75 tons of rock lying at the shaft ready to be sent to the mills.

The Crockett Ledge on Last Chance Hill is turning out good pay rock. The shaft is down 50 feet. The ledge is over 4 feet wide. The rock is being crushed at the Brodie mill.

Mr. West, the inventor of an improved Amalgamating Pan, is now having one, of mammoth dimensions, constructed at the Miners' Foundry, which will be worked upon an improved Patio process. The pan is some 18 feet in diameter and weighs nearly eight tons. It has been constructed for for a Mexican mine in the District of Durango, and will be shipped in a few days, together with a large quantity of other machinery for the same mine.



## LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

Name of Company.	Locality of Mine	Name of Secretary	Locality of Office.	Capital Stock.	Par Value	shs per foot.	ass'ts date	Name of Company	Locality of Mine	Name of Secretary	Locality of Office.	Capital Stock.	Par Value	shs per foot.	ass'ts date
RUTH WINDSOR TUN' CO	Esmeralda District	T. L. Bibbins	305 Montgom'y st	\$100,000	\$100	1	\$	MORAYE, G. S. & Copper	La Paz, Colorado	G. J. Turner	606 Montgom'y st	\$250,000	\$250	1	8
ANTONLOPE SPUR	Esmeralda District	T. L. Bibbins	305 Montgom'y st	400,000	500	1	610	BLICE RICE MINING CO.	Slate Range	G. J. Turner	606 Montgom'y st	240,000	100	3 ft	
JEFFERSON	Gold Flat Nev'a Co	T. L. Bibbins	305 Montgom'y st	500,000	500	1	640	MADISON, SLATE RANGE	Slate Range	G. J. Turner	606 Montgom'y st	240,000	100	2 ft	
COOK	Esmeralda District	T. L. Bibbins	305 Montgom'y st	100,000	100	1	480	SAN RAFAEL, SLATE RANGE	Slate Range	G. J. Turner	606 Montgom'y st	240,000	100	2 ft	
CEADAR	Esmeralda District	T. L. Bibbins	305 Montgom'y st	120,000	100	1	600	CAYTGA MINING CO.	Slate Range	G. J. Turner	606 Montgom'y st	240,000	100	2 ft	
STORME	Esmeralda District	T. L. Bibbins	305 Montgom'y st	120,000	100	1	1,250	ST. CLAIR	Esmeralda District	G. J. Turner	606 Montgom'y st	240,000	100	2 ft	
SKNECA	Esmeralda District	T. L. Bibbins	305 Montgom'y st	120,000	100	1	200	COLE	Esmeralda District	G. J. Turner	606 Montgom'y st	240,000	100	2 ft	
RSD WHITE & BLUE	Esmeralda District	T. L. Bibbins	305 Montgom'y st	120,000	100	1	200	HAWLEY	Devil's Gate Dist.	C. Stevens	6 Parrots Building	880,000	400	1	2,500
LILLY OF THE WEST	Esmeralda District	T. L. Bibbins	305 Montgom'y st	120,000	100	1	200	PETROSA	Esmeralda District	C. Stevens	6 Parrots Building	1,000,000	100	1	
ESTICK	Esmeralda District	T. L. Bibbins	305 Montgom'y st	120,000	100	1	200	CLEAR CREEK	Esmeralda District	C. Stevens	6 Parrots Building	1,000,000	100	1	
BULLION	Van Horn District	T. L. Bibbins	305 Montgom'y st	960,000	100	1		MASIDORA	Sonora, Mexico	F. H. Waterman	618 Merchant str	240,000	100	1	
LAFREL HILL Mining Co	Tuolumne County	C. S. Higgins	410 Montgom'y st	300,000	100	1	280	ORIZABA	Esmeralda District	F. Daniels	Cashier Custom Hs	600,000	400	1	
LYON	Russ District	C. S. Higgins	410 Montgom'y st	1,620,000	500	2	5,275	RHODES JUGGINGS QM Co	Sacramento County	G. E. Touchard	614 Montgom'y st	570,000	500	1	2,250
COMBINATION	Russ District	C. S. Higgins	410 Montgom'y st	990,000	500	2	1,700	SAN VICENT	Aurora, Mono Co.	E. Worth	547 Washington st	700,000	500	1	700
BULLION	Russ District	C. S. Higgins	410 Montgom'y st	405,000	500	2	1,700	ST. CLAIR	Aurora, Mono Co.	E. Worth	547 Washington st	120,000	200	1	
WHITE & MURPHY, G & S	Virginia District	J. P. Nourse	Lucas & Turners bg	126,000	500	2	23,000	FEDERAL UNION	Aurora, Mono Co.	J. F. Bailey	605 Sacramento st	800,000	500	1	600
MIXTA PRIETA	Sonora, Mexico	J. P. Nourse	Lucas & Turners bg	2,200,000	100	1	68,000	SEAFIELD	Cosco District	W. W. Lawton	400 Montgom'y st	1,200,000	250	1	
BURNING MOSCOW	Virginia District	J. P. Nourse	Lucas & Turners bg	480,000	100	2	45,000	JEWELL	Devil's Gate Dist.	Samuel Marx	610 Washington st	120,000	200	1	
BUCKEY	Silver City	F. S. Carter	415 Sansome st	280,000	100	1	3,200	NEWADA COPPER Mfg. Co	Grass Val, Nev. Co	John Armstrong	610 merchant str.	240,000	100	2	1,350
AMERICAN	Virginia District	R. L. Taylor	612 Washington st	50,000	100	1	1,050	CINCO SNOOKS	Esmeralda District	John Armstrong	610 merchant str.	500,000	200	2	
LYON DEL MONTE	Esmeralda District	A. H. Clark	522 Montgom'y st	1,500,000	500	1	1,050	EL PASO	Esmeralda District	J. H. Blood	7 Montgom'y Bldg	50,000	50	1	
SLATE RANGE	Esmeralda District	A. H. Clark	522 Montgom'y st	1,500,000	500	1	1,050	EL PASO	Esmeralda District	J. H. Blood	7 Montgom'y Bldg	50,000	50	1	
ROCHESTER	Esmeralda District	A. H. Clark	522 Montgom'y st	315,000	150	1	315	SAN PATECH	Esmeralda District	J. H. Blood	7 Montgom'y Bldg	100,000	100	1	
PAIDELPHIA	Esmeralda District	A. H. Clark	522 Montgom'y st	315,000	150	1	315	FULTON	Esmeralda District	J. H. Blood	7 Montgom'y Bldg	100,000	100	1	
NEW YORK	Esmeralda District	A. H. Clark	522 Montgom'y st	315,000	150	1	315	KOHLER BRO'S	San Antonio, L. C.	Kohler Bros	Sansome street	24,000	500	1	
CATARGUTS	Esmeralda District	A. H. Clark	522 Montgom'y st	315,000	150	1	7,350	LUCERNE MINING CO.	Gold Hill District	J. S. Paxson	900,000	500	1		
ALBANY	Esmeralda District	A. H. Clark	522 Montgom'y st	315,000	150	1	7,350	MOUNT DAVIDSON G & S	Virginia District	F. A. Rabens	47 Montgom'y Bldg	2,000,000	200	44 in	20,600
DOY BRYAN	Flowerly District	J. F. Bailey	605 Sacramento st	500,000	100	1		Meredith	Esmeralda District	F. A. Rabens	47 Montgom'y Bldg	2,000,000	200	44 in	20,600
DESSERT M. Co.	Flowerly District	J. F. Bailey	605 Sacramento st	500,000	100	1		Merced	Esmeralda District	F. A. Rabens	47 Montgom'y Bldg	2,000,000	200	44 in	20,600
ADRIATIC	Flowerly District	S. R. Rooney	605 Sacramento st	270,000	100	1	5,000	LAZY DAY	Esmeralda District	F. A. Rabens	47 Montgom'y Bldg	2,000,000	200	44 in	20,600
EVERETT	Humboldt, N. Ter.	J. H. Gager	Merch't, mut blk	120,000	100	1	600	Moss	Esmeralda District	R. T. C. Page	428 Montgom'y st	600,000	500	1	
NORTH STAR	Humboldt, N. Ter.	J. H. Gager	Merch't, mut blk	440,000	100	1	60	Madison	Esmeralda District	P. B. Cornwall	608 merchant str.	800,000	500	1	
CRYSOPOLIS	Silver Mtn. mono.	J. H. Gager	Merch't, mut blk	200,000	100	1	60	South Utah	Esmeralda District	P. B. Cornwall	608 merchant str.	400,000	500	1	
ESTRELLA DEL MONTE	Humboldt dis. n. t.	J. H. Gager	Merch't, mut blk	300,000	300	1		Melones & Stanislaus Co	Calaveras County	L. Franconi	Lucas & Turner bg	150,000	50	18 in	
MANHATTAN	Humboldt dis. n. t.	J. H. Gager	Merch't, mut blk	180,000	100	1	1,380	Alameda Coal Min'g Co	Alameda County	L. Franconi	Lucas & Turner bg	500,000	100	1	
LYON DEL MONTE	Esmeralda District	J. H. Gager	Merch't, mut blk	252,000	210	1		Gold & Curry	Esmeralda District	J. C. L. Wadsworth	40 Montgom'y Bldg	1,500,000	100	1	3,000
SIERRA	Humboldt, N. Ter.	J. H. Gager	Merch't, mut blk	60,000	100	1	60	LAZY DAY	Esmeralda District	J. H. Blood	40 Montgom'y Bldg	1,500,000	100	1	
SIGEL	Humboldt, N. Ter.	J. H. Gager	Merch't, mut blk	245,000	100	1	60	Porter	Esmeralda District	R. C. Page	420 Montgom'y st	300,000	500	1	
OCCIDENTAL	Humboldt District	J. H. Gager	Merch't, mut blk	600,000	500	1		Scorpion	Esmeralda District	R. C. Page	420 Montgom'y st	300,000	500	1	
ANNIE LAURA	Humboldt District	J. H. Gager	Merch't, mut blk	570,000	500	1		Ruby	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
STARLIGHT	Esmeralda District	J. H. Gager	Merch't, mut blk	570,000	500	1		Silver City	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
ZEINA	Esmeralda District	William Winchester	Aurora, Mono Co.	120,000	100	1		Succor	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
ALABAMA	Devil's Gate Dist.	J. O. Strauch	815 Sansome street	100,000	200	1		Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
WIDE WEST MINING CO.	Esmeralda District	Coll Dean	325 Montgom'y st	1,300,000	500	1	14,300	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
LYON DEL MONTE	Esmeralda District	S. P. Patee	522 Montgom'y st	1,700,000	400	1	6,400	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
ESMERALDA MINING CO.	Esmeralda District	S. P. Patee	522 Montgom'y st	1,700,000	400	1	6,400	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
ESMERALDA, N. EXTENS'N	Esmeralda District	S. P. Patee	522 Montgom'y st	900,000	1000	1	13,200	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
SILVER HILL, CONSOLID'N	Esmeralda District	S. P. Patee	522 Montgom'y st	1,500,000	500	1	6,750	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
ANTONLOPE	Esmeralda District	S. P. Patee	522 Montgom'y st	600,000	500	1	27,000	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
LOUISA	Silver City District	J. F. Pope	115 California st.	200,000	100	1	1,000	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
ROGERS	Flowerly District	J. F. Pope	115 California st.	900,000	300	1	92,250	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
ALAMO	Devil's Gate Dist.	J. F. Pope	115 California st.	300,000	100	1	4,500	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
BEILA VERA	Esmeralda District	S. Sprague	706 Montgom'y st	72,000	500	1	8,400	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
BURNSIDE	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	800,000	400	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
BAUBER	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
IOWA	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
LATROBE TUN & MFG CO	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
NORTON	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
REESE RIVER	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
LAUREL HILL	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
SAYAGS MINING CO.	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
CALIFORNIA	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
CHITRAL	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
CEADAR HILL M. & T. CO.	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
CHOLLAR	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
CHENANGO	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
CROWT POINT	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
CLARKES CAVE	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
CORCORAN	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
EMMETT	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
DOYLE	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
ISAACS	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
KOHLER	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
LIVINGSTON	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
VIBHARD	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
CHARLES CRICHTON mining co	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
DARE	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
LILY DALE	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
MAMMOTH, No. 1	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
MOUNT HOPE	Esmeralda District	R. N. Van Brunt	706 Montgom'y st	1,200,000	1000	1	15,800	Sierra	Esmeralda District	W. H. Clarke	224 Montgom'y st	180,000	100	1	
SOLED															



**DESKS**  
AND  
**Office Furniture,**  
OF ALL KINDS.....FOR SALE BY  
**JOHN WIGMORE,**  
No. 423 CALIFORNIA ST., SAN FRANCISCO.  
OFFICE JOBING, of all kinds, attended to.

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19, First Street, San Francisco,  
Furnish Castings and Machinery of all kinds  
ALSO:  
GENUINE WHITE IRON SHOES AND DIES.  
PALMER, HANSCOM & CO.  
**To Quartz Miners.**  
Knor's Improved  
AMALGAMATING PAN,  
WITH  
PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST  
complete amalgamation of the precious metals of  
any process now known.  
It is introduced in the most effective and economical  
manner, while it is peculiarly adapted to the  
treating of floating gold and silver, known to be otherwise  
lost. Made exclusively by  
PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco  
The public are informed that Letters Patent have been  
granted to the undersigned upon Steam Chest False Bottoms  
for the inside of Amalgamating Pans or Tubs, and are  
cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

**T. C. Sanborn & Co.,**  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.  
PHILIP SILVER MINING STOCK,  
GOLD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

**DEETKEN'S**  
**Chemical and Metallurgical Works,**  
On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 30 to 60 per cent higher than the BEST AMALGAMATION PROCESS.  
Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by all owners. No power nor clean water required for purpose.  
nov8-3m

**LEWIS COFFEY AND RISDON,**  
**STEAM BOILER AND SHEET IRON WORKS.**  
The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.  
Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
LEWIS COFFEY, J. N. RISDON.

**THEODOR KALLENBERG**  
**Maker of Models**  
FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.**  
No. 4 Sansome street, corner Market,  
San Francisco.  
nov3m

**International Hotel,**  
JACKSON STREET, ----- SAN FRANCISCO  
[A few doors above Montgomery]  
**FIRE-PROOF BRICK BUILDING.**

Most convenient to the  
Steamer's Landing, Businessmen, & Places of Amusement  
**OPEN ALL NIGHT.**  
City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Five Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**  
and sets as good a table as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.  
F. E. WEYGANT, PROPRIETOR.

**Tremont House,**  
418 and 430 ----- Jackson Street,  
[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE PROOF BUILDING OFFERS MANY ADVANTAGES** to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.  
The House is conducted on Temperance Principles, WHICH SECURES TO OUR GUESTS QUIET.  
The prices for board and Rooms are very moderate--by the day, meal or week. WE SOLICIT A CALL FROM ALL.  
F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurbished the INTERNATIONAL Hotel, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.  
F. E. WEYGANT.

**Volcanic Smelting Furnace.**

**PERSONS DESIRING INFORMATION AS TO THE USE** and economical properties of this Furnace, and intending to make use of the same, when satisfied of its superiority over all other means of reducing ores and separating metals from the sulphurets, can obtain all needed explanation and advice in regard to the same, and the terms of sale of rights to use the same, on application Col. J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietress through the Post Office of San Francisco.  
Drawings may be seen at the office of Col. J. D. Stevenson, No. 614 Merchant street, or at the office of T. Ogg Shaw, in Brannan's Building, Montgomery street.

The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form.  
The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of capacity for smelting one ton of ore or more, on signing an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention or a longer period than two months.  
mch 16 MRS. E. J. HALL, M.D., Proprietress.

**LEANDER RANSOM,**  
**Civil Engineer**  
AND  
**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

**ALSO**  
**STATE LOCATING AGENT.**  
And as such having the sale of  
600,000 ACRES OF STATE SCHOOL LANDS,  
**At the low price of \$1.25 per Acre.**  
Terms--Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

**The Occidental Hotel**  
IS NOW  
**Open for the Reception of Guests.**

**THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS,** and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious READING and EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**  
AND A LARGE  
**CABINET FOR MINERALS;**

**A Branch Telegraph Office,**  
Connecting with all the lines throughout the country.  
LEWIS LELAND & CO.,  
Proprietors.  
San Francisco, Jan. 1st, 1863.

**John R. Sims,**  
  
Oregon street, between Washington and Davis and Front and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and Shutters, Bank Vaults, Grating, Cemetery Railings.** All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

**Mr. Sims Appreciates the Past** liberal patronage of his friends, and trusts that he may continue to merit it in the future.

**For the Information of Strangers** he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attest. A large assortment of second hand shutters for sale at low rates. ap13

**NATHANIEL GRAY,**  
**General Furnishing Undertaker,**  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

**FULTON FOUNDRY & IRON WORKS**  
**HINCKLEY & CO.,**  
MANUFACTURERS OF

**Steam Engines,**  
QUARTZ, FLOUR AND SAW MILLS; CAST IRON  
FRONTS, FOR BUILDINGS, MINING PUMPS,  
AND ALL KINDS OF MACHINERY, ETC.,  
FIRST STREET,  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*.\* All kinds of IRON and BRASS CASTINGS furnished at short notice. Every style of FURNISHING to Iron when cast. Repairing of Machinery neatly done.  
PATTERNS KEPT in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**W. T. & J. GARRATT,**  
**City Brass and Bell Founders**  
Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE** and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of all sizes. Manufacturers of "Garrett's Patent Improved Journal Metal."

**SQUARZA'S PUNCH.**  
**FIRST PREMIUM**  
AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.  
**ALSO; FIRST PREMIUM**  
At the San Francisco Bay District Agricultural Fair, 1863  
MANUFACTORY, WHOLESALE AND RETAIL,  
No. 44 Leidsdorff street,  
Opposite the What Cheer House, San Francisco.

**To Mine Owners.**  
**PARTIES having a Good silver Mine** and wishing for Machinery to work it for an interest in the Mine Will do well to apply at this office. No organized company need apply.

**50 lbs. MARINE and Fire-Proof Paint,**  
MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Miners Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

**DIRECTIONS:**  
For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.  
For sale by all Ship Chandlery and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**  
When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**  
HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.  
ROOF:—Five parts of Mineral Paint, one part white Lead, mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
G. T. Fouque, Superintendent.  
**WORKS, North Beach; Office, 318 California st., San Francisco.**

**WRIGHT'S PICKS.**  
JOHN WRIGHT, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

**REMOVAL.**  
**OFFICE OF THE PACIFIC METAL** lurgical Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.  
Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
318 California street, near Sansome.

**WANTED,**  
**GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,**  
BY FRONTIER A. DEVERCY,  
13 ap 487 Pine street, San Francisco.

**FREDERICK MANSELL,**  
**MECHANICAL & ARCHITECTURAL DRAUGHTSMAN,**  
No. 422 California street, corner of Leidsdorff.  
Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

**HAYNES & LAWTON,**  
IMPORTERS AND DEALERS IN  
**CROCKERY,**  
GLASS WARE,  
**FRENCH CHINA,**  
Coal Oil Lamps, Table Cutlery,  
**CLOCKS,**  
Silver Plated and Britannia Ware,  
ETC., ETC., ETC.  
NO. 516 SANSOME STREET,  
[CORNER OF MERCHANT,]  
SAN FRANCISCO.



## SPECIAL NOTICES.

**Office of the Ophir Silver Mining Co.,**  
San Francisco, June 6, 1863.—A dividend on the capital stock of this Company has been declared, payable on and after the 9th instant.

The Transfer Book will be closed until the 9th inst.  
THOMAS J. LAMB, Secretary.

**Office of the Table Mountain Copper Co.**  
An assessment of Twenty-five cents per share was this day levied upon the capital stock of this Company, payable immediately, in gold coin of the United States, to the Secretary, at the office of the company, No. 528, Montgomery street.

M. G. ELMORE, Secretary.  
San Francisco, May 18, 1863.

**The Annual Meeting of the Stockholders** of the Table Mountain Copper Company will be held at the Office of the company, No. 528 Montgomery street on the second Monday in June next, at 7 P. M.

M. G. ELMORE, Secretary.  
San Francisco, May 18, 1863.

**Office of the Nevada Copper Mining Co.**  
March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty Cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees.  
J. ARMSTRONG, Secretary.

**Office of the Tennessee Gold and Silver Mining Company, No. 7, Montgomery Block.**—At a meeting of the Board of Trustees held April 22, 1863, an Assessment of One Dollar and Fifty Cts per share upon the capital stock of said Company was levied, payable on or before Saturday, the 13th day of May, 1863.

J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863.

**J. F. & H. H. SCHAFER**  
Manufacturers of and Dealers in  
**BEDDING and FURNITURE,**  
of every description,  
Blankets, Comforters, Sheets, Etc., Etc.  
Nos. 504 and 506 Sansome Street,  
(Near Clay.) San Francisco.

This Establishment is now generally known to be the Cheapest Place in the City for good Bedding.  
Branch Store.....Road St., Nevada.

**WHEELER'S**  
**Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated on the side of others on the same fact, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\*As These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
no16-tf ZENAS WHEELER.

**PEOPLE'S**  
**Steamship Line!**  
connecting California and New York  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
J. H. BLETHEN.....COMMANDER

Will be dispatched for  
**SAN JUAN DEL SUR,**  
From Mission street Wharf.

**WEDNESDAY, - - - June 10, 1863.**

Punctually at 9 o'clock, A. M., on  
Connecting at GREYTOWN with the Splendid Steamship  
**AMERICA - - - - - 2500 Tons.**

Reduced rates of Passage and quick trips are secured by the re opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, opp. Post Office.

**The Pacific Mineral Company**

**MAKE LIBERAL ADVANCES UPON THE ORES OF**  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-tf Montgomery Street, San Francisco.

**MARTIN & Co.,**

OFFICE--224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

**Purchase of Copper Ores,**

Assaying 8 per cent. and upwards of Copper to the Ton.  
We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Sacks will be furnished and Freights Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York. San Francisco.  
San Francisco Post Office, Box 1259.  
je 1.

**REYNOLDS'**

**Patent Cut-Off and Governor,**  
FOR STEAM ENGINES.

127 of these Invaluable Machines,  
ARE NOW IN USE

In California and Nevada Territory, giving a perfectly regular motion and

Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor**

Is the CHEAPEST, SIMPLEST and QUICKEST to act and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

**Clark's Steam and Fire Regulator,**

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

**Ingersolls Patent Drill Press,**

With which drilling can be done the same as with the common racket, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

**Felt for Steam Boilers, Pipes, Etc.,**

At the lowest market rates.

**Steam Engines, Boilers, Pipes,**

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

**Anti Incrustation Powder,**

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years. Refer to—Sugar Refinery, San Francisco, Cottell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States.

E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

**Percy Douglas,**

IMPORTER OF

**CROCKERY,****FRENCH CHINA,**

Glass Ware, Etc., Etc.

No. 421, MONTGOMERY STREET.

SAN FRANCISCO.

**A. C. MORSE,**

**Mining and Real Estate Agent,**

OFFICE—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS**  
with MINER S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

**MYERS & DAGGETT'S**

**Mining and Stock Exchange,**

No. 23½ B Street, Virginia City, N. T.

**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* \* Abstracts of Titles Furnished, Etc.

**Pacific Mail Steamship Company.****NOTICE.**

**ARRANGEMENTS HAVE BEEN MADE**  
by which shipments of

**Gold, Silver and Copper Ores**

can be forwarded under through Bills of Lading from San Francisco to England, at reasonable rates. For further particulars apply to

A. B. FORBES, Agent,

23-tf Corner Sacramento and Leidesdorff streets.

**P. M. STEAMSHIP COMPANY.****NOTICE.**

**Until further notice, the Steamers of**  
Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above start sail on Sunday, the steamer will be dispatched on the following Monday.

A. B. FORBES, Agent.

**Wm. P. TAAPFEE,**

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,**  
CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,  
SAN FRANCISCO.

**A. ROMAN & Co.,**

WHOLESALE AND RETAIL

**Book Establishment,**  
417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.  
A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.  
A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigot on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman. Gold Mining and Assaying; by Phelps.

Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide, or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake. Ure's Dictionary of Arts, Manufactures and Mines. Weisbach's Mechanics of Machinery and Engineering. Nevill's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

**Together with many other works in this and similar lines**

Books imported to order on short notice.

A. ROMAN & Co.

417 & 419 Montgomery Street.

**New Patent Agency**

**WE HAVE CONNECTED WITH THE**  
Publication of the "MINING AND SCIENTIFIC PRESS"

**The Patent Agency Business,**

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency**

The most desirable place to make application for Letter Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco. EWER & SMITH.

**FOREIGN PATENTS OBTAINED**

By application at this office, Room 27, Federal Building. EWER & SMITH, Solicitors.

**NOTICE TO INVENTORS.**

Inventors wishing to file Caveats should apply at the Office, Room No. 27, Federal Building. Terms moderate. EWER & SMITH.

**PATENT RIGHTS.**

**Patent Rights Bought and Sold,**  
At the office of the "Mining and Scientific Press" Agency. EWER & SMITH.

**IMPORTANT TO INVENTORS.**

Inventors who obtain their Patents through this Office can have their inventions illustrated and described the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

**P. M. S. CO.**

**PACIFIC MAIL STEAMSHIP COMPANY**  
line to PANAMA, connecting via the Panama Road with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the month of May, 1863.

June 13th, - - - Steamer Constitution

June 23d, - - - Steamer Orizaba

Will leave Folsom Street Wharf, with Passengers a Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.  
For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidesdorff sts.

**Miners' Foundry**

—AND—

**MACHINE WORKS**

First St., between Howard & Folsom

SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS**  
Machinery, the Best and Most Economical, manufactured in the state of California, will be furnished with a patch at the Miners' Foundry and Machine Works, as

Steam Engines and Boilers, Flower, Saw and Qu mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* \* Parties desiring to test their ores practically, small quantities will be afforded ample facilities, free cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING

San Francisco, February 23, 1863.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, JUNE 15 1863.

NO. 33.

The accompanying cut represents the Amalgamator invented by Mr. THOS. VARNEY of this city. The inventor resided in Virginia City from Nov. 1860 to Dec. 1861. During that time the extracting of metals from their ores, particularly silver, having become a matter of deep interest to many, he was led to examine the machinery in general use for amalgamating, and became convinced that it could be improved. From that time to the present he has devoted his time and attention entirely to this subject.

His theory is, that to extract the precious metals from their ores, particularly silver, the ores must be reduced *very fine*—that ores will continue to yield metal as long as the particles can be reduced in size and that no process can extract the metal by amalgamation until the ore is made fine.

Further, that the particles of metal as soon as liberated, should at once be brought in intimate contact with quicksilver; hence he deems it necessary to pulverize the ore in the presence of quicksilver, but the machinery should be so constructed as to grind the quicksilver as little as possible.

Furthermore that the apparatus heretofore in use has been too slow in its operation, making too much machinery necessary.

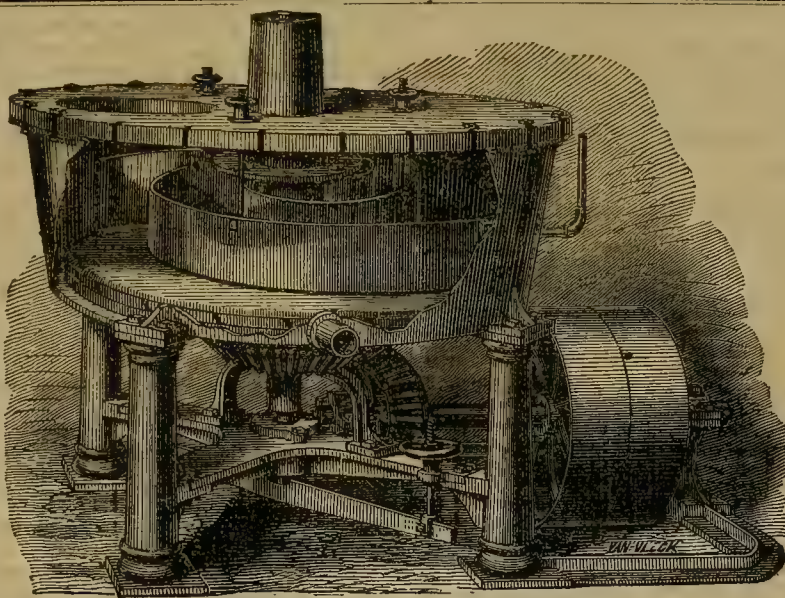
Like most valuable inventions, this machine has passed through a regular series of improvements, from its commencement to the one above illustrated. It seems to us that this Amalgamator is a very great improvement on machinery heretofore in use, and the great demand for them goes to show that others think as we do.

To explain the operation of this invention we copy from the specifications in the patent granted Dec. 16, 1862.

"This invention consists in the employment or use of a rotary and stationary muller placed within a suitable pan or tub, provided with a cover and arranged in such a manner that when the device is in operation the ore will pass in a current or stream outward from the centre, and between the mullers to the circumference of the same and thence onward over the upper rotary muller to the centre of the same, and down through said muller, between it and the lower stationary one, to be again thrown to the periphery of the mullers; thereby causing all the particles to be brought in contact with the quicksilver, &c."

This invention also consists in the employment or use of curved or spiral scrapers, placed within the pan or tub, and arranged relatively with the upper surface of the rotary muller, in such a manner as to insure the passage or movement of all heavy substances in the pulp, along with the current, &c."

The machine which we illustrated in this paper some time since, called "Wheeler's Amalgamator," is in principle and mode of operating, similar to the above. A suit is now pending in the U. S. Circuit Court, between Mr. VARNEY



VARNEY'S AMALGAMATING PAN.

and Mr. WHEELER and others for infringement.

These Machines work 1000 lbs. at a batch, and will complete three tons in twenty-four hours. They are manufactured by DONAHUE, BOOTH & Co., at the UNION FOUNDRY in this city, and the workmanship is superior to anything we have seen in Amalgamating Machinery.

**TONS OF BULLION.**—According to the Territorial Enterprise, the daily shipment of bullion from Nevada Territory, at this time, is *two tons*. Two tons of bullion, as it comes from the Washoe mines, is worth about \$125,000; and that amount per day would give *three and a quarter millions per month*, or \$39,000,000 a year. These are pretty large figures; but perhaps the present shipments are being made from a surplus of past accumulations, which will soon become exhausted and so let down the yield, in a short time, to a reasonable figure—say *one million per month*. Washoe will be entitled to all the credit in mineral productiveness, that any similar extent of population need ask for, if she will only come up to the latter figure during the ensuing twelve months.

**WAR RISKS.**—The increasing depredations upon our commerce by the English-confederate pirates, has had the effect to materially increase the charge for war risks upon vessels passing from the Eastern States or Europe to California. The war risk has been gradually advanced, until it has now reached 10 per cent., which, with the ordinary charge of 2½ @ 3 per cent., makes a very heavy tax on general merchandise seeking a market in this State.

The Gipson Quartz Mill, in Tuolumne county, turned out \$5,000 week before last.

**EFFECT OF PRESSURE ON ELECTRO-CONDUCTING POWER.**—M. Elie Wartmann has found experimentally that the electric conductivity of copper wire is sensibly diminished by a pressure of 50 atmospheres, that this diminution increases with the pressure, and disappears when the pressure is relieved. The experiments were carried up to 400 atmospheres. These results establish a new analogy between heat, light, and electricity.

**THE ENTERPRISE GOLD & SILVER MINING COMPANY** recently filed their certificate of Incorporation, with a capital stock of \$100,000, in 1000 shares of \$100 each. C. A. James, President; Rodney Clark, Secretary. The mine of this Company is located in the Colorado District, Mexico.

**Plumbago.**—The Ione Copper Mining Co., at a depth of about 35 feet, have struck black lead, about two feet wide, said to be of an excellent quality.

The coinage of the United States Mint, of this city, for the month of May amounted to \$2,206,000.

#### REVENUE TAX UPON PRODUCTS OF IRON FOUNDRIES.—

The Commissioner of Internal Revenue has made the following decisions with reference to taxes imposed on various products of iron.

1st. All steam engines, whether marine, locomotive or stationary, are subject to a duty of three per cent ad valorem.

2d Cast-iron shafting is liable in all cases to a specific duty of one dollar and fifty cents per ton, under the act of March 3d, 1863. Wrought iron shafting, if held to be manufactured within the meaning of division No. 71, is liable to a tax of three per cent ad valorem.

3d. Railroad car-wheels are taxable in all cases, one dollar and fifty cents per ton. All other castings of iron exceeding ten lbs in weight, not otherwise provided for, are taxed one dollar and fifty cents per ton, by act of March 31st, 1863.

4th. Castings of all description made exclusively for instruments, articles or machinery upon which duties are assessed and paid, are exempt from duty under section second, act of March 3d, 1863.

5th. Castings not exceeding ten pounds in weight, which are so well known and so generally used as to have a commercial value in themselves, are taxable three per cent ad valorem, when not otherwise provided for.

**NO DRAFT IN CALIFORNIA.**—The draft will soon be enforced in the East, but it is stated that there will be no draft ordered in California, unless a foreign war or an important demonstration on our lower borders should make it necessary to raise troops here.

**REMOVAL.**—Mr. Wm. Shiels has removed his office from its former location on Merchant Street, to 309 Bush Street. Mr. S. is largely interested in the Copper interest.



## THE MINERS' LABORATORY.—NO. VII.

## METALLIFEROUS TREATMENT OF PYRITES

No mining district in the world, probably, is more prolific of Pyritous ores than the State of California and the adjoining Territory of Nevada. The treatment of Pyrites, for the metals of gold and silver is one of the most difficult of metallurgical processes, and one in which but few have succeeded. Perhaps no one on the Pacific Coast has been more successful than Mr. DEETKEN, at his works near this city, on the San Bruno road. Millions of dollars have, without doubt, been allowed to pass away in the auriferous pyrites contained in the tailings of our quartz mills, which have been allowed to run down the creeks and ravines near which the mills are usually placed. The treatment of these stubborn ores is a matter involving great chemical skill, and has been made the subject of much study and experiment. Hence any suggestions on this subject coming from sources of acknowledged skill and experience, are ever deemed valuable. Mr. Deetken's process is known as the "Hydrochloric process, and his *modus operandi* was fully described by our predecessor in this paper, about one year ago. We have long intended to visit this establishment and again speak more fully of it, and shall endeavor to do so soon.

In the concluding portion of this article we have alluded to "Keith's Desulphurizing Process," which was fully described in our issue of the 2nd of March last. Our present purpose is to lay before our readers the ideas of a practical Metallurgist of Washoe, upon this subject, as communicated to the Washoe Times, from which we quote.

"The necessity for the sulphurated ores being reduced to a powder as fine as flour, must be self-apparent to every one as it is connected and combined with two of the most subtle matters known, sulphur and arsenic, both of which, we will hereafter show how they may be effectually discharged without loss to the valuable contents of the ore. It being the fact that these two substances pervade the whole body of the ore, it is clearly evident that the ore must be reduced to the finest powder, ere their enemies can be attacked with a certainty of overcoming them. To effect this, the ore should, after it leaves the stamps, pass through a series of sieves, say three in number. These can be very inexpensively arranged, in a case or housing lined with sheet zinc, which will prevent any of the material from escaping, and entirely preclude any annoyance to the parties engaged in the reduction works. These sieves should be so arranged that the coarser parts of the ore shall be deposited in a chamber for their reception, in order that they may be recrushed, and the finest received in a bin by itself.

As stamps appear to be the usual mode adopted in this country for crushing the ore, we have treated of their use first; but the best method of crushing these ores, is by a crushing mill, composed of three pair of cast rollers, with chilled faces, which are easily renewed, and with the sieves attached. By this method the ore is reduced to the finest powder, as none but that fit for use comes down; the coarser particles, that will not pass through the sieves, being carried back to the upper hopper of the mill without any manual labor, and without the smallest loss either of power or material. This method requires little or no attention, and thereby saves much expensive labor. We will assume that there is a bin filled with finely powdered ore. Now, let us examine what we have in this compound. Here is iron in arsenicated sulphuret, arsenic in the mass, as well as in association with the iron, sulphur admixed with all the material, and silver diffused in the same manner in particles as fine as the sulphur itself. The first ingredient to be attacked is the iron, which we have shown is an arsenicated pyrites. Having this matter in a highly-pulverised state, there is no difficulty in altering its whole chemical feature, by converting it into an oxyd. This is not a very costly process, the reagents for accomplishing which would not cost, in this country, more than five dollars for a ton of ore. This process requires a few days, according to the amount of iron that the ore contains. The whole material will now be in color, from a slate gray to a light reddish brown. In this state the iron will give forth any of the precious metals that may be held in combination. Having subjugated enemy number one, we now attack the combined antagonists of arsenic and sulphur. This is effected by placing the oxydized material into a large wooden vessel called a desulphurizer, having first admixed with it the reagents that will cause it to give forth both the deleterious materials with which it is charged. The cost of these reagents would be from three to four dollars to the ton of ore. Each desulphurizer should hold from one to two tons of ore, or they may be made larger should it be required. This wooden vessel is made steam tight, and is filled by a run hole on the top. To it is attached two or three pipes, with cocks, by which steam is admitted, and the whole mass is kept in motion by the means of wooden arms, attached to a shaft of the same material, which is moved slowly by any power that the works

may have adapted. By this method the reagents are admixed through the most minute portions of the ore. On the top of the vessel is fixed an iron gun-barrel pipe, in which is a stop-cock, which is kept closed at the commencement of the process, but opened gradually as the heat advances. The desulphurizer is never filled to repletion; therefore the space unoccupied by the ore is filled with sulphurated arsenicated hydrogen, which is allowed to pass off through the gun barrel pipe, which should be long enough to carry off the vapor to some distance from the works, as the flour of arsenic will fall in coming in contact with the air; or, a safer plan is to carry the pipe, with an inverted discharge, into a tank of water placed sufficiently high to receive it. This tank must be used for no other purpose; the flower of arsenic will be precipitated there, and no deleterious effects will be communicated to the air. This process of removing these two ingredients will occupy from two hours and a half, according to the amount of sulphur, arsenic and sulphurous acid that the ore contains. The appliances to effect this object are also inexpensive in their character, even in this country. This simple method of desulphurization precludes the necessity of using either the roasting or reverberatory furnaces; it does the work required with more ease, and more effectually and much more economically, and without any loss of the valuable contents, and also without any annoyance to the men employed—as there is no dust or pernicious vapors thrown off in the buildings—and the labor is lessened by two-thirds, as one man can well attend to three vessels; added to which there is no loss of a portion of the metallic contents of the ore, as in the use of the reverberatory furnace, in the use of which—the ore being a sulphuret and brought in contact with the fire—the combustion that takes place in working the ore, causes the gaseous portions to be given off as a sulphurated, arsenical hydrogen gas, and combustion carries with it a portion of the silver. This can easily be proved, by placing a piece of silver in a covered crucible with some powdered sulphur and arsenic, and placing the same in a white heat for half or three-quarters of an hour and then removing the cover of the crucible; when, immediately, the oxygen of the air comes in contact with the contents and a brownish vapor will commence to ascend, and, if allowed to remain in the fire a few minutes, on removal, the silver will be found to have been volatilized and passed off in gaseous vapor.

J. B. TRUCKEE.

In a subsequent communication to the Time, "J. B. Truckee" writes as follows in allusion to the "Keith Process":—

"The method of the reduction of the ore to a fine powder, by the means of a hollow drum, with the edge runner fan inside, I have no doubt is a very efficacious and quick method of bringing the matrix to the pulverulent state in which it is uniformly required, and which is a very primary desideratum, and one to which too much attention cannot be paid. \* \* \* I am of opinion that the desulphurizing process is not so good as the one which I mentioned in an article in your Journal of March 7th [The article here referred to is the one we have copied above—Ed. Press.] and for several reasons:—

First, the use of fire in the operation of desulphurization must be attended with some loss of the valuable contents of the ore, which is an arsenicated sulphuret, by the fact that the heated ore, must, in throwing off its sulphur and other deleterious matter, in a gaseous form, and in contact with the oxygen of the heated air, carry with it a portion of the sulphuret of the silver contained in the ore, which must be evolved and pass off thereby making a serious discount on the percentage of yield in the results. This loss will be necessarily increased according to the larger amount of sulphur etc. contained in the ore. In fact, this plan is open to the same objections, as the use of the reverberatory furnace, and must secondly, be far more expensive than the simple method spoken of in the paper above referred to. By the use and admission of steam to the vessels there described, and the perfect manner of the admixture of the simple reagents, the desulphurizing is effected at the least possible expense, and in the quickest possible time, in the most efficacious manner, and without the possibility of the smallest loss of the valuable contents of the ore, from the deprivation of any of its valuable contents. I do not wish to be thought egotistical in my views of this subject, as I have no patent for this simple process, but merely introduce it in the place where it stands, in the series of papers, for the purpose of showing how easily the most subtle foes to the extraction of the silver from sulphurated ores could be subdued and entirely dispelled."

## THE "KEITH PROCESS."

A correspondent of the Washoe Times appears to be very desirous to learn something about the cost, etc., of the machinery employed at the Pike's Peak Mines for reducing quartz in connection with what is known as the "Keith Process," remarking that "It would be of great general benefit could the inventor (Mr. Keith) furnish us with some data as to the cost of the drums, and copies of the drawings or lithographed plans of the invention, and the amount of royalties that he would require for that portion which is patented."

The machine referred to is a Rotary Crusher, known, we believe, at Pike's Peak, as the "Young America Crusher." The method of reduction is by the rapid revolution, in a hollow drum, of a set of arms or beaters. These arms are made to revolve, i we mistake not, at the rate of ten or twelve hundred rotations a minute. The quartz being thrown into the machine through a hopper, is instantly reduced to a powder by the rapidity of these beaters, and forced out in a very fine dust by the current of air provided by the rapid motion.

This machine can be obtained at the Golden State Foundry in this city. Messrs. Palmer, Hanscom & Co., the proprietors, have already constructed several of these machines, for a Mexican Company, under the direction of Mr. Leeds, who has used it in the Atlantic States. The cost of the machine is about \$300, and it will weigh, all ready to run, about 1300 lbs.

The use of this "pulveriser," as it may properly be termed, requires a first breaking up of the quartz into very fine fragments. Say to the size of hazlenuts. The best machinery to accomplish this portion of the work, with which we are acquainted, is "Blake's Stone Breaker." This machine has a world-wide reputation as an efficient and reliable agent for the reduction of rock of any kind to small fragments, such as are required for macadamizing roads, manufacturing concrete, etc. It is also very generally used by iron ore smelters in Pennsylvania, and Missouri, for reducing their ores—the hardest in the world—to a proper size for smelting. These machines are constructed of different sizes. One which will crush, say one and a-half tons of quartz per hour, will weigh, with frame all complete for running, about 6000 lbs.—the castings alone will weigh 4000, and will require a six-horse power to drive it. Machines are made of five graduating sizes up to twice the capacity of the one above described which is the smallest made. The machine is so constructed that it can be driven by any power less than that required for its full working, down to two-horse power, the product of the machine, being simply reduced in like proportion. One of these machines may be seen in almost constant operation at the foot of Market St., in this city.

We fully agree, with the correspondent above alluded to, in his opinion of the "Keith Process." This correspondent, by the way, is evidently one of eminent practical and scientific attainments, in every department of mining. He has been for some months writing a series of very valuable metallurgical articles for the Washoe Times, under the signature of "J. B. TRUCKEE." We quote the conclusion of his letter, already referred to:—

"I should certainly feel much obliged for more information on the subject of Mr. Keith's simple crushing mill for pulverizing the ore, as I have no doubt that it is a vast improvement upon the ponderous stamping process, of which I am no admirer, for I prefer the crushing mill. Mr. Keith's method appears to be more efficacious, as well as more expeditious in its work, for it appears to reduce the ores to the finest powder without the aid of sieves, which are required in the ordinary crushing mill. His invention requires to be well thought upon by all parties interested in the reduction of the ores of this country, as, if it can perform what is stated of it, a vast amount of power of reduction will be attained by every mill throughout the Territory; and the same amount of propulsion used in a stamping mill would most certainly produce nearly double the results and, if the ore is turned out in the state described, it is in a much better condition for giving forth its contents than nine out of ten mills are capable of reducing it to. It must be clear that the extreme rotative momentum of the fan in the drum must be next to irresistible by any substance coming in contact therewith."

Mono County was organized a little more than one year ago. It is a long, narrow strip, extending in length from Walker's River to the 37th parallel South, a distance of about 150 miles. In breadth it extends from 20 to 60 miles. Mono Lake is in the center, and Owen River waters a considerable part of the central and southern portions.

DEATH OF AN EDITOR.—DAVID WENTWORTH, Editor of the Oroville Union, died on the 27th ult., of congestion of the brain, aged 34 years. Mr. W. came to this State in 1860; has resided in Oroville since August last, at which time he engaged in the publication of the Union. He leaves a wife and child in the East. He was a relative of Mrs. SUGOURNEY, the Poetess.



REMOVING SCALE FROM BOILERS.

A series of important experiments have recently been carried out at Portsmouth on board Her Majesty's paddle-steamer Wallace, under the supervision of Mr. G. Murdock, Inspector of machinery afloat at that port. The object sought to be attained, is the removal of the scale generated on the surface of steam boilers and their tubes, by other and more expeditious means than by the present system of manual labor. The importance of the subject will be fully comprehended by all who may be in the slightest degree conversant with steam machinery. Under the present system, to clean a ship's boiler requires cleaning out, or cleaning from aloft, while on board the ship, all the boiler doors have to be taken off and a number of men sent into the boilers to remove the scale by manual labor. By these means, with the greatest exertions and any amount of time, possibly 10 per cent. of the scale might be removed, and with this small improvement the engineer well knows the relief he finds in getting steam. By the system which has now been undergoing so long a series of tests on board the Wallace, only the door of the boiler has to be taken off to allow the introduction of the steam pipe. The boiler to be acted upon, is then filled rapidly with superheated steam at a temperature of 400° of heat; this acting upon the saline deposits on the surface of the tubes, and other parts of the boiler, expands and disengages it from the several parts. After this the boiler is again filled with water, and steam got up in the usual manner, and kept up for a few hours, and on afterwards blowing off the boilers, they are found to be as free from scale as when they were first put on board the ship. The experiments have been highly successful. The saving of fuel alone in our steam ships of war from adapting this plan to their boilers, will be very considerable, and the scale may be removed from a ship's boilers in 12 hours. A very remarkable specimen of scale may be seen in the chemical laboratory in Portsmouth Dockyard, which was removed from the boilers of Her Majesty's ship Sidon, then under the command of Sir Charles Napier. The impression of the tubes on the scale is perfect.

**BALANCE ROLLING BRIDGES.**—Messrs. Turner and Gibson, of the Hammersmith Works, Dublin, have invented balance rolling bridges, of a very simple and convenient construction, which are easily worked and especially adapted for crossing dock entrances, canals, &c. The bridges have also been erected, and found to answer admirably for ordinary traffic and railroads.

**AMERICAN SILVER IN CANADA.**—A letter from Toronto, Canada, says that it is estimated that there are 30 tons of American silver in circulation, or rather hoarded up, in Toronto, London and Hamilton. Merchants take it only at 5 per cent discount.

TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all mineraliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; the rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and heating the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel,

and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphureted ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector. These articles will be published under the head of "THE MINER'S LABORATORY," and will be found of great value to the mining public. [*Mining and Scientific Press, April 20.*]

**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

Mining and Scientific Press

The MINING AND SCIENTIFIC PRESS is published at the Exchange Building, Room 27, corner of Battery and Washington streets San Francisco, Cal. at FIFTY CENTS per month, or \$4 per annum, in advance.

C. W. M. SMITH and W. B. EWER, - - - - - Proprietors

Engravings, Electrotypes, etc.

We execute at this Office Engravings and Illustrations on wood, stone, copper, steel, etc. STEREOGRAPHY AND ELECTROTYPING. Designs of every description—Buildings, sketches of Towns, Machinery, Stamp Mills, Seals for Plain or Colored Printing. Job Work executed with dispatch at low rates. Patrons will remember that when we execute engravings we will insert them free of charge in the MINING AND SCIENTIFIC PRESS, thus giving the advantage of a Wide Circulation throughout the Pacific Coast in the best Advertising Medium to be found in the country.

To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR: VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

The paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

**To Chemists, Architects, Millwrights and Farmers!** This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

Terms.

To mail subscribers:—Four Dollars per annum.

Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80 Names can be sent in at different times and from different Post-offices Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

Our Mint, its Rules, Charges and Operations.

For parting silver from gold when gold

is below 300-1000ths. fine ..... 3cts per oz.  
" from 30-100ths. to 750-1000ths fine. 7 cts " " oz.  
" " 750-1000ths to 950-1000ths " 14 cts " "

DEPOSITS SILVER BULLION—PURCHASER.

\$1.21 per standard ounce 1/2 per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " " "

DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce, 1/2 per ct. gross value of silver for making bars; also when gold is contained 1/2 per ct. on gross value of gold for coining. Refining charges as in purchases.

BARs SOLD FROM REFINERY.

\$1 21cts. per standard oz. 1/2 per ct. gross value to be added for making bars.

DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz. 1/2 per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz. 1/2 per ct. gross value of deposit for making bars.



## SUPPORT YOUR MINING PAPER.

THE MINING AND SCIENTIFIC PRESS is the only mining paper in California, and the only medium through which our miners can derive, to any extent, that practical information in relation to their difficult and hazardous calling, which is so essential to an intelligent and successful prosecution of their business. Small as is the modicum of information we have yet been able to give, we have frequently had the satisfaction of personal assurance from our mining readers, that they have often been benefitted by one or two numbers only, more than they could possibly have been by a full year's subscription expended in the purchase of any book or books in the State. We intend to embody in the papers under the head of "Miners' Laboratory," all the published information valuable to miners, and all that can be obtained orally or in manuscript, from such intelligent miners and mining writers with whom we may meet or correspond. Of course, we do not expect to exhaust the subject in one, two, three or four years. Mining, like all other industrial callings, is progressive, and almost every day is developing new facts, in some quarter, which it is desirable should be laid at once before the mining public. This office it is our aim to perform, in addition to collecting and placing before them all standard information. The present is most emphatically an age of progress, and no one can hope to excel or succeed even, in any occupation, without being kept constantly posted in the current improvements in relation thereto.

California, is now upon the mere threshold of mining. Our labors, thus far have been like mere pin scratches upon a school boy's globe.

In years to come, and in few years and short, compared to mining progress in other parts of the world, we shall be burrowing deep, thousands of fathoms deep, into the bowels of the earth. Then other knowledge than that relating to mere surface workings and surface indications will be needed. So long as we continue to manage this paper, we shall endeavor to time our articles devoted to mining instruction, to the most urgent necessities for the time being. We are now in the midst of a "Copper Excitement," and for the past few weeks we have been endeavoring to throw out a few practical hints which shall be most advantageous to our copper hunters. If any think we have failed to give important information on this point, let them invest \$50 in the most judicious manner possible, for books treating upon this subject, and see how much information they will get for their \$50, on the ground which we have traveled over, over and above what we have given them for one dollar in the MINING PRESS.

We shall for the present drop the "mineralogy of copper," and devote a few numbers to the various processes of separation and concentration which the ores of copper require, to prepare them for a market or for the furnace.

We shall take up SILVER, after we have done with COPPER, as our next and perhaps most important subject for examination.

As we stated in the outset, the MINING AND SCIENTIFIC PRESS, is the only paper in California, and in fact, on the Continent, which is especially devoted to the mining interest—particularly with the view of collecting, collating and imparting valuable information to the working miner. Other papers of our City and State devote a liberal share of their columns to general, local and topographical information with reference to the mines, and to some extent keep up a record of their progressive advancement. That class of information, however, is valuable only to the general reader, or to the miner, so far as it may aid him in selling his stocks; but it is of no possible advantage to the working miner, as an aid in the difficult and, to most in this State, untried calling of developing our mines or seeking out new ones.

True, we are devoting but a small space to this class of information, from the fact that in a journal of this kind it is necessary to give variety to its columns; but with an enlarged sheet, such as we propose, we shall be able to do full justice to this important development. As yet we have been able to issue a sheet of only very moderate proportions. But we commenced with nothing, and worse than nothing, as we have been compelled to overcome a most deep seated antipathy against our predecessor, which has cost us far more labor and money than an entirely new enterprise would have done. This antipathy, we believe, has

been pretty much overcome, and we have good reasons for thinking that all who are now doing business with this office are perfectly satisfied with the manner in which our business is transacted.

Our enterprise, commencing as we have already said from nothing or worse, has gradually advanced until it is now self sustaining—at least upon its present basis. But still we are not satisfied. We wish to double the size of our sheet, and treble the amount of reading matter. With such a paper we feel confident that we could be of vast service to the mining interest of the Pacific Coast, and, by the information which we could collect and disseminate, add largely to the general advancement and prosperity of the entire mining interest, to say nothing of the character, and additional importance which such a sheet would give to our great leading interest abroad. But printers will not work for nothing, and paper dealers, at the present time especially, come in for a large percentage of newspaper receipts.

True, our patronage is increasing weekly and daily. Subscribers are coming in from all parts of the State as well as from the city. Advertisers are also beginning to find that the MINING PRESS is a valuable medium for introducing them to the public—especially those transacting business with the mines or who are engaged in mechanical pursuits, and we take this opportunity to thank our friends, who have interested themselves in our behalf, for their efforts.

Perhaps we ought to be content to creep a while longer, but we much prefer to be taking manly strides, and to occupy a position commensurate with the interest which we represent. This we might very soon accomplish, and double the size and usefulness of our sheet, if those in this City directly engaged in mining operations, would bestow upon us but a moiety of that patronage belonging to us, but which is now scattered in various directions and given to those journals whose only tendency in the direction of mining, is to foist upon the public, speculative operations, without imparting any practical information which shall be of value in the actual development of our mines. Our city circulation has now reached an extent and character, which renders our columns a desirable and appropriate medium for "mining notices" of every description—particularly notices of meetings, sales of stocks, &c. Weekly insertions of such notices, as a general rule, are all that are requisite or of any benefit to the Companies. And the fee for such notices, if concentrated in our columns, would enable us to accomplish the desirable object of increasing our sheet from eight to sixteen pages, and so improving the paper as to give it a still wider circulation, and thus return to the companies, by its general usefulness to the mining interest, four fold value for the patronage which they are asked to bestow to enable us to accomplish the end desired. We throw out these hints for what they are worth. The mining public can judge from what we have done to make a mining paper, what might be accomplished under more favorable auspices. The need of a first class mining paper all admit. There is ample business in this city to support it if it can be concentrated. It will cost the mining interest nothing beyond what they now pay—nay, less than they are now paying, to establish and sustain such a paper. Will they do it?

A MOST ELEGANTLY FINISHED and ingenious piece of mechanism may be seen at the Machine Shop of MR. DAVID STODDART, at the corner of Pine and Front Streets, the same being a patent Injector, recently purchased by the Gould & Curry Co., for supplying the steam boiler of their mill with water.

This instrument is one of the most ingenious devices which the inventive genius of the age has produced. It has been pronounced, by the most eminent French Engineers, when used as a feed-pump for steam boilers, as absolutely perfect in theory, and the best, most reliable and safest apparatus which has ever been invented for that purpose. The Academy of Sciences, of Paris, have awarded the inventor what is known as the Montyon prize of 1000 francs, for having produced "the most deserving invention of instruments useful to agriculture, the mechanic arts, or science," for the year.

The invention was first introduced some four or five years since, and is fast coming into general use all over the world. The California Steam Navigation Co. have them upon eight of their boats; there are six in use at the Mare Is-

land Navy Yard. They are now being introduced into the mines of this State. The one above alluded to, designed to be put up at the Gould & Curry Mill at Washoe, is well worth the attention of mechanics, as well for the beauty and style of its finish as for the intrinsic merits of the invention. Mr. STODDART is agent for the sale of these machines on the Pacific Coast.

## THE MINING STOCK MARKET.

No material change has occurred in the Mining Stock Market during the week. The same discrimination noted for a few weeks past still continues to govern operations. A few stocks of accepted value have advanced during the past six days, while some shares of real merit have receded, through mere neglect, on the part of buyers. Stocks, especially in a fluctuating market, seldom remain firm at any figure, for any considerable length of time, without demand. This is particularly the case in speculative stocks, or those whose value is based chiefly upon prospective developments.

Gould & Curry is still advancing and holders are more confident than ever, of the large dividends in future. The closing bid for these shares on Saturday was \$5,100, with \$5,200 asked. The advance during the week has been \$700.

Ophir is still declining. We quote today at \$2,150. The continuance of low dividends, and large anticipated disbursements for additional mill facilities, etc., are bringing into the market the shares of irresolute holders, and a decline is a natural consequence, notwithstanding the firmness manifested by large stockholders.

The New Almaden Quicksilver Mine, according to the *Mercuriale Gazette*, is in active operation, the yield being abundant, and everything progressing quietly in the usual routine. The shipments of Quicksilver from this port, chiefly the product of this mine since the 1st of January last have amounted to 17,182 flasks (of 75 lbs. each) against 13,500 flasks for the same period of last year.

Savage has further advanced and may be quoted at \$2750. It is expected that the first dividend of this Company will be paid the first of August.

Chollar.—The directors of this Company levied another assessment of \$72 per foot on Saturday last. The Stock has been in considerable demand the past week, at an advance, but a decline may be looked for this week in consequence of the new assessment.

Potosi has attracted much attention. On Wednesday some of the large holders threw their Stock on the Market at \$400 @ \$450, with considerable sales, causing a panic amongst those who had been anxious to purchase early in the week at \$500 @ \$550. At the close \$450 was offered for small lots.

Daney has been in demand during the week at \$390. The dividend for June on 200 shares has been sold for \$13½ per foot. One lot has been sold as high as \$15. Sanguine holders are expecting \$20.

Burning Moscow has been considerably dealt in, the past week, mostly on time. Much anxiety is felt by holders with regard to the issue of the Ophir injunction.

Yellow Jacket is greatly in favor, and closes firmly at \$925.

Overman may be quoted at \$200.

Wide West commenced at \$205, and closed at \$215, with a strong market.

Silver Hill sold as low as \$34.

Real del Monte, \$140; Utah opened at \$60, and closed firm at \$70; Bamboo, but little dealt in at \$55 to 60; Pont dropped to \$20, with considerable sales; Sunbeam, \$7 Rhodes Diggings, occasionally bought at \$35 to \$40. Jo sebbine, a declining market, last sold at \$13 50. Willow Springs, 6 50 to \$8. Union, (R. D.) \$2 25 to \$2 50. Sheba, has a dull market, closing at \$410. Melones, advanced to \$115. Sacramento and El Dorado, sold at \$70, without any feature.

Lucerne is inquired for at \$18 to \$19.

Lady Bryan has a market at \$7 to \$7 50.

St. Louis has been largely operated in at small prices.

Mt. Davidson is more in demand, and has reached \$5.



## THE COPPER INTEREST.

The Copper Interest is fast assuming a leading importance throughout the State. The shipments of Copper Ore from the interior are constantly increasing, while buyers of the ore from both home and foreign markets, are multiplying in this City. Capitalists have now become fully alive to the importance of this new interest and the steady advance of stock in reliable mines, is a sure index of the confidence felt in their value and permanence. Copper mines, in all parts of the world, have ever proved the most reliable and uniform in yield, of any of the precious metals, and the practiced eye of numerous experts from Cornwall and other copper mining regions, recognize, here, the same unmistakable evidence of permanence and uniformity which characterize the mines of this metal elsewhere.

In addition to this most encouraging evidence, we have also the admitted fact that the mines of California, as a whole, so far as developed, far exceed in richness those of any country, unless, perhaps, we may except those of Lake Superior. Hence it is not at all a matter of astonishment, that public attention should be so strongly inclined in this direction, or that the Copper future should even exceed the silver mania on Montgomery st. at high noon of cheerful day.

From the Mines of Calaveras County we continue to hear the most cheering accounts. The product of the mines of that region is constantly increasing in quantity and improving in quality. Stock in the Union Mine is estimated as high as \$1,000 per foot with none offering.

The Keystone, adjoining the Union may be quoted at \$150 per foot, with but little offering. This mine has a large force employed. Concentrating machinery is now being put in operation in connection with this mine.

The Napoleon may be quoted at \$150 with \$250 asked. The vein of ore in this mine is rapidly improving.

The Josephine, an extension of the Napoleon is offered at \$35 @ \$40 per foot. We are not informed of the progress of the work upon this mine, although we believe considerable is being done.

The Newton, in Amador County, is still raising and forwarding very rich ore. The mine promises well. We are not aware that there is any of its stock in the market.

The Copper Mill Company is in the same vicinity, and is also coming into notice, although they have no stock in the market. The Company is shipping ore.

In the Campo Seco mine, Calaveras County, 1225 feet changed hands a few days since for \$24,750—a fraction over \$20 per foot.

We understand that a few of our prominent brokers are about to visit the mines of Calaveras and Amador, to determine for themselves the capability of these mines to pay the dividends predicted by the present owners. We propose a trip in that direction ourselves, as soon as the concentrating machinery now in progress of erection shall be in operation.

From Placer and El Dorado Counties, we hear highly favorable reports. Much activity still exists in these Counties in the search for new, and the development of discovered mines.

Similar reports reach us from Nevada County, although our advices from that quarter are not as full as we wish they were. Our correspondents, in that direction are somewhat remiss in their favors; in consequence, probably, of too much personal interest in feet. We learn that the "Last Chance," of Rough & Ready have filed their certificate of incorporation. This stock is estimated very high. We understand that offers of \$70 @ \$80 per foot fails to loosen the grasp of holders upon their favorite stock. The mine at last accounts showed a 15-foot vein, well defined.

In Butte County rich indications are constantly being found, and prospecting is going on with much spirit.

In Del Norte, the lack of road facilities, and scarcity of experienced laborers is operating quite unfavorably to the development of the mines, although most excellent indications and prospects are everywhere found. These hindrances will soon be obviated. The Mammoth, from that section, exhibits fine ore in this city—So also does the Alta.

At the Mount Diablo mines work is being vigorously prosecuted with encouraging prospects, but, so far as we have been able to learn, with no important results up to the present time.

## GENERAL MINING STOCK REPORT.

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending June 13, 1863.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir.....	10,800	12	\$300	2.00	2.00	2.00	2.150	2.150	5.160
Gould & Curry.....	4,800	4	500	4.400	4.475	4.600	—	4.650	5.100
Central.....	1,800	12	300	—	—	—	—	—	—
California.....	3,900	12	300	—	—	—	—	—	—
Chollar.....	5,800	4	300	460	475	497½	500	525	530
Potosi.....	2,800	2	500	600	450	490	410	—	425
Hale & Norcross.....	8	0	500	850	800	875	—	—	—
Sierra Nevada.....	3,000	1	600	52½	60	47	49	47½	48
Bancroft.....	8,000	4	500	335	—	345	355	385	375
Burnside Moscow.....	4,800	1	500	160	160	160	160	160	160
North Potosi.....	2,000	1	200	—	—	—	—	—	—
Rogers, F. D.....	3,000	1	250	—	—	—	—	—	—
Meredith.....	7,200	2	125	—	—	—	34	—	31
Charles Canby.....	1,800	1	300	80	75	75	80	82½	82½
Sacramento.....	1,800	1	500	—	—	—	—	—	—
Lucerne.....	1,800	1	500	—	—	—	—	—	—
Lady Bryan.....	5,000	1	100	—	—	—	—	—	—
Savage.....	800	—	—	—	—	—	—	2550	2625
Iowa.....	—	—	—	—	—	—	—	—	—
El Dorado.....	—	—	—	75	—	—	67½	—	—
Norton.....	1,600	1	—	14	18	18	19	19½	18
La Crosse.....	—	—	—	—	—	—	—	—	—
Moss.....	—	—	—	—	—	—	—	—	—
Porter.....	—	—	—	—	—	—	—	—	—
Burnside.....	—	—	—	19	21½	25	23½	22	23½
Adair.....	—	—	—	—	—	—	—	—	—
Brennan.....	—	—	—	—	—	—	—	—	—
Quartz Hill Tunnel.....	10,000	1	100	—	—	—	—	—	—
Mount Davidson.....	10,000	1	200	3	1½	3½	3 62	4½	4½
Pride of the West.....	—	—	—	—	—	—	—	143	—
G. G. Quartz M. Co.....	—	—	—	—	—	—	—	—	—
Imperial.....	—	—	—	450	—	—	—	—	—
<b>ESMERALDA STOCKS.</b>									
Wide West.....	2,600	1	600	190	200	200	205	203	208
Antelope.....	1,200	1	500	—	—	—	—	—	—
Esmeralda.....	1,600	1	1000	12	17½	17	17½	17½	15
Real Del Monte.....	4,400	1	400	105	100	140	160	125	110
Alta.....	1,200	1	100	—	—	—	—	—	—
Utah.....	1,800	1	250	60	60	62½	72½	70	—
Virginia Hill.....	3,000	1	500	40	35	35	34	34	44
Nevada.....	1,200	1	250	25	25	25	25	25	—
Federal Hope.....	—	—	—	—	—	—	—	—	—
South Utah.....	—	—	—	—	—	—	—	—	—
Jenny Lind.....	—	—	—	—	—	—	—	—	—
Falls of Clyde.....	—	—	—	8	5	1	—	2½	—
Sunbeam, S. W. ex. B.....	—	—	—	—	—	—	—	—	—
Bamboo.....	600	1	500	42½	—	—	42½	55	—
<b>JOSEPHINE STOCKS.</b>									
Josephine.....	4,800	2	250	14	—	13	13	12½	13½
Coso.....	1,600	1	600	—	—	—	—	—	—
Willow Springs.....	2,700	1	100	—	7½	7	6¾	6¾	5
Empire.....	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta.....	2,200	1	1000	—	—	—	—	—	—
Dios Padre.....	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon.....	2,700	1	600	150	—	—	—	—	—
Josephine.....	—	—	—	—	—	—	—	25	25
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill.....	—	—	—	4½	8½	5	5	4¾	—
Utica.....	—	—	—	—	—	—	—	—	—
Rhodes Diggings.....	—	—	—	—	—	—	—	—	—

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, June 11, 1863.

Bid.	Ask'd	Bid	Ask'd
<b>Virginia Mining District.</b>			
Ashland.....	\$ 9 10	Sierra Nevada.....	\$ 55 60
Allen.....	90 100	Sacramento.....	70 75
Atchison.....	150 —	Shamrock.....	15 —
Alturas.....	5 7	Texas.....	6 78
Beldridge.....	40 —	Union.....	100 —
Birdsell.....	30 35	U. S. Tunnel.....	5 6
Bajazet and Golden Era.....	25 30	U. S. Tunnel.....	65 75
Burnside.....	18 20	Old Virginia.....	25 —
Burnside Moscow.....	145 150	Washington.....	5 —
Beach-Paxton.....	112 155	York.....	6 8
Bloomington.....	5 7	Zouave.....	17 20
Ceresus (Buchanan).....	250 —	<b>Gold Hill District.</b>	
Cedar Hill Tunnel.....	15 20	Alpha.....	700 750
Cole.....	15 20	Baltic.....	17 20
Commercial.....	15 20	Bullion.....	75 80
Consolidated Cedar Hill.....	3 3½	Belcher.....	575 600
Durgen.....	3 5	Brauch Mint.....	4 5
Empire.....	6 —	Caledonia.....	35 40
Edwards.....	10 125	Coppers.....	10 —
El Dorado.....	200 225	Eureka.....	15 20
Grass Valley.....	65 75	Forende & Beard.....	6 8
Hazel Green.....	5 7	Gold Hill, Big Ledge.....	40 45
Harrison, Virginia Incepo.....	20 25	Golden Gate.....	5 —
Harrison, San, Fran. Incepo.....	20 25	Golden Eagle (No. 1).....	12 15
Irving.....	25 30	Hawkeye.....	20 25
Insurance.....	25 30	Hudson.....	150 175
Iowa.....	115 120	Koh-i-noor.....	200 250
Ironides.....	16 6	Laboring.....	150 175
Indus.....	10 12	Lucerne.....	18 20
Junia.....	10 12	Mary Ann.....	55 60
Keystone.....	25 30	North American.....	20 25
Kenosha.....	8 10	North Ophir (nominal).....	10 12
La Crosse.....	9 10	Overman.....	175 200
Lancer.....	10 12	Original.....	5 —
Madison.....	30 35	Omogeton.....	500 —
Meredith.....	40 45	Princess.....	90 95
Mt. Davidson.....	5 6	Sinaloa.....	20 25
Massillon.....	— 10	Swezey.....	— 8
McBee.....	25 —	Stephenson-Kehoe.....	8 9
Milton.....	60 65	Union.....	40 45
Monarch.....	20 25	Yellow Jacket.....	700 750
Mohegan.....	10 12	Yulee Sam.....	2 5
Norton.....	18 20	Yulee.....	20 25
Oakland.....	12 15	<b>Devil's Gate District.</b>	

Ophir.....	5½ 6	Governor Nye.....	9 10
Sierra Nevada.....	12 15	Hawley.....	25 30
Pride of the West.....	25 —	Montgomery.....	7 8
Peckham.....	40 —	Pride of the West.....	165 160
Peckham.....	100 110	Winnemucca.....	6 —
Perseverance.....	40 —	Wide West.....	12 —
Rogers.....	70 —	<b>Flowery District.</b>	
Reedbank.....	17 20	Atwell.....	— 4
Santa Fe.....	45 —	Lady Bryan.....	3 4
Santa Fe.....	35 —	Lady Bryan.....	7 8
Sutro.....	15 20	Harrison.....	5 6
St. George.....	25 —	Uncle Sam.....	5 —

## REMARKS.

The exceedingly dull market below, finds its reflex here, and but little improvement can be looked for in Virginia City, until more animation is noticed in San Francisco.

## ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, May 26, 1862.]

Bid.	Ask'd	Bid	Ask'd
Alpine.....	\$4 10	Keeley.....	30 —
Amador.....	— 5	Live Yankee.....	15 —
Atlantic.....	10 —	Lord Byron.....	7 12
Arcade.....	6 10	La Plata.....	7 12
Antelope.....	15 20	Mah Kamoralla.....	45 50
Alturas.....	15 20	Mourne.....	— —
Atuna.....	— —	McKistery Tunnel Co.....	10 —
Brazili.....	12 20	Monte Christo, Tunnel co.....	40 —
Redie Bull Consolidation.....	20 —	Mutual.....	30 —
Bodie Peak, Bodie District.....	10 —	Mount Brady.....	10 —
Great Eastern.....	10 15	Mutual.....	4 —
Bright Star.....	60 —	Meredith.....	12 18
Bullion (Van Horn Dist.).....	10 —	North Willow Springs.....	50 75
Bodie Bluff, No. 1.....	12 18	New Esmeralda Consol.....	6 —
Bodie Bluff, No. 2.....	5 —	Newton.....	50 —
Bunker Hill.....	14 15	Nevada, (Tunnel).....	15 —
Bonaparte, Tunnel comp.....	30 —	Ozark.....	20 —
Caucasian.....	25 —	Old Winnemucca.....	3 6
Chinax.....	10 —	Paul Tunnel Co.....	5 —
Crockett.....	85 100	Pacific.....	15 —
Cape.....	— 5	Pond.....	70 —
Davis, consolidation.....	— 5	Pride of Antelope.....	10 15
Durgen.....	9 —	Peru (two ft. to the share).....	15 —
Delta.....	8 —	Pennsylvania Tunnel Co.....	4 —
East End Ex. Ex. Ural.....	12 —	Real Del Monte.....	125 —
Excelsior, Excelsior Dist.....	3 —	Rebecca.....	15 38
Empire.....	28 —	Red, White & Blue.....	20 —
Franklin, Tunnel company.....	10 —	Stauffer Tunnel Co.....	10 —
Fallstaff.....	20 —	Schenectady.....	7 10
Fallstaff, Consolidation.....	4 5	Strawberry.....	20 25
Fresno.....	9 12	Silver Hill.....	65 95
Falls of Clyde.....	10 19	Silver Hill, Bodie District.....	7 —
General Hooker (Con.).....	14 25	St. Louis.....	5 —
General Jackson.....	13½ 14	Tuscan.....	6 8
Garibaldi.....	25 30	Tiger.....	4 —
Golden Harvest.....	5 —	Tucker.....	15 —
Golden Cross.....	15 20	Tennessee.....	12 25
Governor Seymour.....	25 —	Union Tunnel.....	20 30
Golden Age.....	32 45	Utah.....	100 150
Great Britain.....	8 12	Ural Extension.....	600 —
"Golden Era" Tunnel Co.....	2 3	William Tell.....	10 —
Greenback.....	20 35	Wide West.....	395 —
Hanover.....	10 15	Washington, Tunnel comp.....	15 —
Howard Tunnel Co.....	12 —	Western Summit.....	90 110
Heath.....	\$12 15	X-Eliza and Constantinople	1½ —
Horn Consol.....	15 —	consolidated.....	45 60
Horn Chuck, Excelsior Dis.....	5 8	Yulee.....	25 30
Junia.....	10 18	Cincinnati.....	25 30

## REMARKS

The "Crockett" Ledge, on Last Chance Hill and the "Cincinnati" on Silver Hill have, the past few days, caused considerable excitement in this district by the development of unusually rich ore. The Crockett is down to a depth of about 60 feet, and the Ledge is over 5 feet wide.

About 100 tons of rock has been hauled to the mills, preparatory to crushing, which it is believed will yield over \$200 to the ton.

The Cincinnati has also a large amount of rock out at the shaft which is believed to be equally rich.

**THEATRICAL.**—We have for some time contemplated supplying our numerous readers in the country, with short theatrical criticisms, so that, on visiting the city, they may know where to find the best entertainment. This week, however, we have to confine ourselves to the Eureka, where the San Francisco Minstrels nightly hold forth. Since the Eureka opened with this troupe, it has been well patronized by large audiences of both sexes, and it is well understood now, that the most fastidious need not fear meeting with anything vulgar in the performances. The singing is of the first-class character, with the solitary exception, perhaps, of a little too much instrumental accompaniment. Birch and Cotton this week, in the "Black Statue," "Virginia Mummy," and "Scenes in the Police Court," have been very happy. Let those given to fits of despondency take a dose of their drollery, and we vouch for a better frame of mind. Those, loving good music, and a good laugh, are unjust to themselves, and these popular actors, if they omit visiting the Eureka.

## POST-OFFICE COMPLAINTS.

We hear frequent complaints from subscribers in various quarters, with regard to the non reception of papers, and have found it impossible, in several places to extend our circulation, for the only reason that the "Press" can not be obtained regularly from the Post-Office. We know not where the fault is. The paper is regularly mailed at the San Francisco Office, done up in strong wrappers, and carefully directed. Subscribers who fail to receive their papers regularly should first learn from their local Office, whether, when the papers do arrive, they come in good order, or whether the wrappers have been removed, etc., and communicate all the facts to us. We will then endeavor to learn the cause of the irregularity, and so far as possible rectify the same.



Name of Company	Location of Mine ;	Secretary	Locality of Office
-----------------	--------------------	-----------	--------------------

Name of Company	Location of Mine	Secretary	Locality of Office
-----------------	------------------	-----------	--------------------

Name of Company	Location of Mine ;	Secretary	Locality of Office
-----------------	--------------------	-----------	--------------------

We wish it distinctly understood that all the interests which Julius Silversmith ever had in the MINING AND SCIENTIFIC PRESS, ceased in November of 1862. EWER & SMITH are now the publishers and proprietors.



## DESKS

AND

Office Furniture,

ALL KINDS.....FOR SALE BY

**JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBING, of all kinds, attended to.

**PALMER, HANSCOM & CO.,**

**GOLDEN STATE IRON WORKS,**

No. 19, First Street, San Francisco,

urnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

**To Quartz Miners.**

**Knox's Improved**

**AMALGAMATING PAN,**

WITH

**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of by process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the melting, floating gold and silver, known to be other use lost. Made exclusively by

PALMER, HANSCOMB & CO.,

GOLDEN STATE IRON WORKS,

Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and be cautioned against making, buying, using or selling the same without his consent.

W. A. PALMER.

**T. C. Sanborn & Co.**

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

PHIR SILVER MINING STOCK,

GOULD & CURRY MINING STOCK,

CHOLLAR MINING STOCK,

CALIFORNIA STEAM NAVIGATION CO'S STOCK,

BOUGHT & SOLD.

**DEETKEN'S**

**Chemical and Metallurgical Works,**

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES. ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 50 to 60 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$30 to \$100, if desired by owners. No power nor clean water required for purpose.

nov8-3m

**LEWIS COFFEY AND RISDON,**

**TEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing Old Work, executed as ordered, and warranted as quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

**THEODOR KALLENBERG**

**Maker of Models**

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Lamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.

No. 4 Sansome street, corner Market,  
San Francisco.

**International Hotel,**

JACKSON STREET, ----- SAN FRANCISCO  
(A few doors above Montgomery.)

**FIRE-PROOF BRICK BUILDING.**

Most convenient to the  
Steamer's Landing, Business etc. & Places of Amusement

**OPEN ALL NIGHT.**

City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**

and such as good a table as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

**Tremont House,**

418 and 420 ----- Jackson Street,  
(A few doors from Montgomery.) SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY ADVANTAGES** to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

**The City Railroad Cars pass the Door.**

The House is conducted on Temperance Principles,  
**WHICH SECURES TO OUR GUESTS QUIET.**

The prices for board and Rooms are very moderate by the day, meal or week. WE SOLICIT A CALL FROM ALL.

F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

**Volcanic Smelting Furnace.**

PERSONS DESIRING INFORMATION AS TO THE USE and economical properties of this Furnace, and intending to make use of the same, when satisfied of its superiority over all other means of reducing ores and separating metals from the sulphurets, can obtain all needed explanation and advice in regard to the same, and the terms of sale of rights to use the same, on application Col. J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietress through the Post Office of San Francisco. Drawings may be seen at the office of Col. J. D. Stevenson, No. 614 Merchant street, or at the office of T. Ogg Shaw, in Brannan's Building, Montgomery street.

The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form.

The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of a capacity for smelting from one or more tons, on signing an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention or a longer period than two months.

mch 16 MRS. E. J. HALL, M. D., Proprietress.

**LEANDER RANSOM,**

**Civil Engineer**

AND

**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct 7-3m

**The Occidental Hotel**

IS NOW

**Open for the Reception of Guests.**

**THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS,** and will be conducted equal in every respect to the first class houses of the Atlantic cities.

The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**

AND A LARGE

**CABINET FOR MINERALS;**

ALSO

**A Branch Telegraph Office,**

Connecting with all the lines throughout the country.

LEWIS LELAND & CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

**John R. Sims,**



Oregon street, between Washington and Davis and Fron and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and Shutters,** Bank Vaults, Grating, Cemetery Railings. All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

**Mr. Sims Appreciates the Past**

liberal patronage of his friends, and trusts that he may continue to merit it in the future.

**For the Information of Strangers**

he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attest. A large assortment of second hand shutters for sale at low rates. api3

**NATHANIEL GRAY,**

**General Furnishing Undertaker,**

641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

**FULTON FOUNDRY & IRON WORKS**

**HINCKLEY & CO.,**

MANUFACTURERS OF

**Steam Engines,**

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,

**FIRST STREET,**

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*\*\* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.

PATTERN MAKING in all its various forms. Prices low.

D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**W. T. & J. GARRATT,**

**City Brass and Bell Founders**

Cor. First & Market sts., San Francisco.

**BABMET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, flange cocks, Cylinder cocks, Globe, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, etc.; COUPLING JOINTS or ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."**

**SQUARZA'S PUNCH.**

**FIRST PREMIUM**

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

**ALSO; FIRST PREMIUM**

at the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

**To Mine Owners.**

**PARTIES having a Good silver Mine** and wishing for

Machinery to work it for an interest in the Mine will do well to apply at this office. No organized company need apply.

**50 lbs. MARINE and**

**Fire-Proof Paint,**

**MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.**

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Trademen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

**WORKS, North Beach; Office, 318 California st., San Francisco.**

**WRIGHT'S PICKS.**

**JOHN WRIGHT,** of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.

JOHN WRIGHT, 611 Market street,  
Opposite Battery, San Francisco.

**REMOVAL.**

**OFFICE OF THE PACIFIC METAL** lurgical Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Sil versmiths' sweepings reduced or purchased.

**COPPER ORES**—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
318 California street, near Sansome.

**WANTED,**

**GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,**

BY FRONTIER A. DEVERCOY,

13 ap

487 Pine street, San Francisco.

**FREDERICK MANSELL,**

**MECHANICAL & ARCHITECTURAL**

**DRAUGHTSMAN,**

No. 422 California street, corner of Leidsdorff.

Drawings of MODELS made for parties applying for patents at Washington or London.

mar23 2m

**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

**CROCKERY,**

GLASS WARE,

**FRENCH CHINA,**

Coal Oil Lamps, Table Cutlery,

**CLOCKS,**

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

**NO. 516 SANSOME STREET,**

1 [CORNER OF MERCHANT.]

SAN FRANCISCO.



## SPECIAL NOTICES.

**Office of the Ophir Silver Mining Co.**  
San Francisco, June 6, 1863.—A dividend on the capital stock of this Company has been declared, payable on and after the 9th instant.

The Transfer Book will be closed until the 9th inst.  
THOMAS J. LAMB, Secretary.

**Office of the Table Mountain Copper Co.**  
An assessment of Twenty-five cents per share was this day levied upon the capital stock of this Company, payable immediately, in gold coin of the United States, to the Secretary, at the office of the company, No. 523, Montgomery street.

M. G. ELMORE, Secretary.  
San Francisco, May 18, 1863.

**The Annual Meeting of the Stockholders** of the Table Mountain Copper Company will be held at the Office of the company, No. 523 Montgomery street on the second Monday in June next, at 7 P. M.  
M. G. ELMORE, Secretary.  
San Francisco, May 18, 1863.

**Office of the Nevada Copper Mining Co.**  
March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty cents per share was levied upon the Capital Stock of the Company, payable in twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees,  
J. ARMSTRONG, Secretary.

**Office of the Tennessee Gold and Silver Mining Company.** No. 7, Montgomery Block.—At a meeting of the Board of Trustees held April 22, 1863, an Assessment of One Dollar and Fifty cts per share upon the capital stock of said Company was levied, payable on or before Saturday, the 23d day of May, 1863.  
J. H. BLOOD, Secretary.  
San Francisco, April 27, 1863. (tma21)

**J. F. & H. H. SCHAFER**  
Manufacturers of and Dealers in  
**BEDDING and FURNITURE,**  
of every description,  
Blankets, Comforters, Sheets, Etc., Etc.  
Nos. 504 and 506 Sansome Street,  
(Near Clay.) San Francisco.

This Establishment is now generally known to be the Cheapest Place in the City for good Bedding.  
Branch Store.....Broad St., Nevada.

## WHEELER'S Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated on the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans may be seen in daily operation at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
2016-1f ZENAS WHEELER.

**PEOPLE'S  
Steamship Line!**  
connecting California and New York  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
J. H. BLETHEN.....COMMANDER  
Will be dispatched for  
**SAN JUAN DEL SUR,**  
From Mission street Wharf,  
**WEDNESDAY, - - - June 10, 1863.**

Punctually at 9 o'clock, A. M., on  
Connecting at GREYTOWN with the Splendid Steamship  
**AMERICA - - - - - 2500 Tons.**

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route.  
These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to  
I. K. ROBERTS, Agent,  
a20 No. 407 Washington Street, opp. Post Office.

## The Pacific Mineral Company

**MAKE LIBERAL ADVANCES UPON THE ORES OF  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.**

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, OLD FELLOWS' HALL,  
je1-1f Montgomery Street, San Francisco.

## MARTIN &amp; Co.,

OFFICE--224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

## Purchase of Copper Ores,

Assaying 8 per cent and upwards of Copper to the Ton. We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York. San Francisco,  
San Francisco Post Office, Box 1259.  
je 1.

## REYNOLDS' Patent Cut-Off and Governor, FOR STEAM ENGINES.

137 of these Invaluable Machines,

ARE NOW IN USE

In California and Nevada Territory, giving a perfectly regular motion and

Saving 20 to 65 per cent of the Fuel.

## Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

## Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

## Ingersolls Patent Drill Press,

With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

## Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.

## Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

## Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years.  
Refer to—Sugar Refinery, San Francisco,  
Cottell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.

E. T. STEEN AGENT.  
No. 33 Fremont Street, San Francisco.

## Percy Douglas,

IMPORTER OF

## CROCKERY, FRENCH CHINA,

Glass Ware, Etc., Etc.

No. 421, MONTGOMERY STREET.  
SAN FRANCISCO.

## A. C. MORSE,

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS** with MINER S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco. I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

**MYERS & DAGGETT'S  
Mining and Stock Exchange,**  
No. 23½ B Street, Virginia City, N. T.

*Mining Stocks of All Kinds Bought & Sold.*

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* \* Abstracts of Titles Furnished, Etc.

## Pacific Mail Steamship Company.

## NOTICE.

**ARRANGEMENTS HAVE BEEN MADE** by which shipments of

Gold, Silver and Copper Ores

can be forwarded under through Bills of Lading from San Francisco to England, at reasonable rates. For further particulars apply to

A. B. FORBES, Agent,

28-1f Corner Sacramento and Leidesdorff streets.

## P. M. STEAMSHIP COMPANY.

## NOTICE.

**Until further notice, the Steamers of** Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above date fall on Sunday, the steamer will be dispatched on the following Monday.  
A. B. FORBES, Agent.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

## A. ROMAN &amp; Co.,

WHOLESALE AND RETAIL

## Book Establishment,

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Concerning Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter.

By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Pigott on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Phillips.

Micros' Composition and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell.

Silver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weissbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

**Together with many other works in this and similar lines**

Books imported to order on short notice. -  
A. ROMAN & Co.  
417 & 419 Montgomery Street.

## To Mining Companies.

**FOR SALE**—A STEAM ENGINE AND BOILER. The Engine is 30 horse power—10 inch cylinder—2 inch stroke—solid iron frame, with heater, pump, etc. all complete. The boiler has 5 flues, is 24 ft long, 4 inches in diameter, made up from the best three-eight inch Low Moor Iron, and weighs about 5000 pounds.

Both Engine and Boiler are in perfect order and fully guaranteed. Apply to

I. H. HAM, No. 211 Clay st.  
San Francisco, June 18, 1863.

## New Patent Agency

**WE HAVE CONNECTED WITH THE** Publication of the "Mining and Scientific Press"

## The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

## Mining and Scientific Press Agency

The most desirable place to make application for Letter Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office,) San Francisco. EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building. EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Patents should apply at the Office, Room No. 27, Federal Building. Terms moderate. EWER & SMITH.

## PATENT RIGHTS.

**Patent Rights Bought and Sold,**  
At the office of the "Mining and Scientific Press" Agency. EWER & SMITH.

## P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of May, 1863.

June 13th, - - - Steamer Constitution

June 23d, - - - Steamer Orizaba

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.  
je4 Corner of Sacramento and Leidesdorff sts.

## Miners' Foundry

—AND—

## MACHINE WORKS

First St., between Howard & Folsom,  
SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS** Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

Steam Engines and Boilers, Flower, Saw and Gun mill machinery, Mining Pumps, Amalgamators, Rotors, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition. \* \* Parties desiring to test their ores practically, small quantities will be afforded ample facilities, free cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING  
San Francisco, February 28, 1863.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, JUNE 22, 1863.

NO. 34.

## THE MINERS' LABORATORY.—NO. VIII.

HOW MINERS MAY FORM AN APPROXIMATIVE IDEA OF THE PERCENTAGE OF COPPER IN THEIR ORES.

[Miners and others will find the following, which has been furnished us by a skillful chemist, a very simple and reliable method for ascertaining the percentage of copper in their ores. Parties from a distance wishing to provide themselves with this simple apparatus can do so by remitting to us the amount of \$20, free of charge, in return for which we will forward the apparatus by express.]

The following apparatus and chemicals are necessary—Six glass bottles, to hold about 8 ozs. each, the bottle must be flat and wide and the glass very clear; 1 funnel; package of filtering paper; apothecary balance, which will cost about \$5; nitric acid and ammonia, of each a quart, and about one ounce of very thin copper wire.

Weigh out the following quantities of the copper wire, separately:—4 grains, 3 grains, 1 grain,  $\frac{1}{2}$  grain,  $\frac{1}{4}$  grain, dissolve each one by itself, in nitric acid. When dissolved add ammonia until it smells strongly. Transfer the several solutions, each one by itself, into an 8 oz. bottle as before described, and fill up with water; cork tightly.

The bottle containing 4 grains, mark No. 4, the one containing 3, mark No. 3, and so on—each one representing by its number, the number of grains of copper dissolved.

You have now six bottles, each containing a known quantity of copper; the greater the amount of copper the darker the solution is. After doing this, you have a standard solution which will last for years, if properly kept.

When you have an ore to assay, pulverize it very fine, and dissolve 20 grains of it in nitric acid. When the whole has been dissolved add ammonia as above until it smells strongly, filter the solution and wash the residue on the filter, by pouring a little hot water to run through it so as to obtain the whole of the blue solution. Transfer now, your blue ammoniacal solution into an 8 oz bottle. If you have not sufficient of the blue solution to fill it up, do so by adding water. When this is done, compare the colored solution so obtained, with the four standards, which we have already described. If it is as dark as the one labeled No. 4, it is plain that you have 4 grains of copper in your bottle, and that is the quantity of copper in 20 grains of the ore—therefore your ore contains 4 multiplied by 5=20 per cent., of copper. If the solution you have obtained from the ore is not so dark as that of No. 4, compare it with No. 3; if it corresponds, then 20 grains of the ore contain 3 grains of copper, or, 5 multiplied by 3=15 per cent of copper. If it be of the same color as any of the others, proceed in the same manner. But if you find that it is darker than No. 4, pour it into a tumbler, and mix it with an equal quantity of water; shake it up well, fill your bottle with this reduced solution and compare it with No. 4. If it be as dark, then you have twice 4, or 8 grains of copper in 20 grains of ore, which is equal to 40 per cent of copper. If it be of a lighter color than No. 4, compare it with No. 3; should it compare, then you have twice three, or 6 grs. in 20 grains of ore, which is equal to 30 per cent of copper.

If you find that your solution from 20 grains of ore be only of the same color as the ore marked, No.  $\frac{1}{4}$ , 20 grains of your ore contains only  $\frac{1}{4}$  of a grain of copper, which is equal to  $1\frac{1}{4}$  per cent of copper.

## GLOSSARY OF MINING AND METALLURGIC TERMS.

For convenient reference, we have prepared the annexed glossary of the technical and provincial terms relating to the science of mining and metallurgy, which includes most of those in use in this country and in books treating of these subjects. The fact that a great number of Cornish and German miners are employed in our mines readily accounts for the introduction of foreign, provincial words, many of which are already in familiar use in the Lake Superior copper region; others are used in foreign works treating of mining and metallurgy, and have been adopted in English books, when we have no word expressing exactly the same idea.

In the glossary, the letter *C*, affixed to a word signifies that it is of Cornish origin; *F*, follows a term adopted from the French, and *G*, from the German language.

### GLOSSARY.

**Abstrich.**—(*G*)—Impure litharge obtained in the operation of separating silver from lead ores.  
**Abzug.**—(*G*)—The first, very impure litharge which is formed in the operation of cupelling argentiferous lead ores.  
**Adit—adit-level.**—A horizontal excavation or gallery through which the mine is drained. The adit-level is usually commenced from the bottom of the lowest neighboring valley, and extended through the workings of the mine.  
**Adventurers.**—Shareholders, or those interested in a joint mining enterprise.  
**Air-machine.**—Apparatus for ventilating a mine by withdrawing the foul air from it, or by forcing in pure air from the surface.  
**Aitch.**—A piece of ground left unworked near a shaft.  
**Attle.**—Rubbish; rock containing too little ore to be worth working.  
**Average standard.**—(*C*)—The price per ton of the fine copper in the ore, after deducting the charge for smelting, which amounts, at Swansea, to 2£ 5s. per ton of ore.  
**Back.**—The back of a lode is that part of it which is nearest the surface in relation to any portion of the workings of the mine; thus the back of the level is that part of the lode which is above.  
**Bar.**—Term applied in Cornwall to a vein of a different description of mineral crossing the lode or country.  
**Beat away.**—To excavate; a term usually applied to hard ground.  
**Bed.**—A seam or horizontal deposit of ore.  
**Bend.**—(*C*)—Indurated clay; term applied by the miner to any hardened, argillaceous substance.  
**Bluck jack.**—(*C*)—Blende, sulphuret of zinc.  
**Blust.**—The air introduced by the blowing apparatus into the furnace.  
**Blower.**—(*C*)—A smelter of ores.  
**Bounds.**—(*C*)—The limits of the ownership of a tract containing tin ore.  
**Brasque.**—(*F*)—A lining of closely-beaten charcoal, or other carbonaceous substance.  
**Branch.**—A small vein which strikes out from the main lode, or branches from it.  
**Brood.**—Impurities mixed with the ores.  
**Broil.**—The traces of the presence of a lode found in the loose matter at or near the surface.  
**Buckers.**—Men who break or bruise the ore.

**Buddling.**—Separating the ores from the mixture of earthy substances by means of a wooden frame of cistern filled with water.

**Bunch.**—A small quantity of ore in a compact mass in the vein.

**Cal.(C).**—Wolfram; tungstate of iron and manganese.

**Cand.**—(*C*)—Fluor-spar.

**Captain.**—Superintendent of a mine.

**Counter (or contra) lode.**—A lode forming an angle with the ordinary direction of the other lodes in its vicinity.

**Champion lode.**—The principal lode of a mine.

**Clack.**—The valve of a pump of any kind.

**Cob.**—To break up the ore with hammers, so as to sort out the valuable portion of it.

**Cockle.**—Schorl, or black tourmaline.

**Coffin.**—Old workings open to the day.

**Comb.**—The arrangement of the mineral contents of the lode in parallel, crystalline masses.

**Cost-book system.**—The method of working a mine according to certain regulations, by which the adventurers may at any time "sign off," and cease to be liable for any further expenditure in proving the mine. The plan is to insert in the "cost-book" the name and address of each of the adventurers who first work the mine, with all the subsequent transfers of shares, and every expense attached to the undertaking; a meeting of the proprietors is held every two months, at which the purser presents his accounts, made up to that period, and the share-holders are thus enabled to judge of the state of the undertaking before incurring any further liabilities.

**Country.**—The strata or rock which the vein traverses; the rock in the neighborhood of the vein.

**Course.**—The direction of the vein.

**Cross course.**—A lode or vein which intersects another at a considerable angle, and which frequently throws the first out of its course.

**Cross-course spar.**—(*C*)—Radiated quartz.

**Cross cut.**—A level driven at right angles with another to intersect the lode.

**Crop.**—The best ore.

**Crop out.**—To come to the surface; referring to strata.

**Crush.**—To grind the ores without water.

**Cut.**—To intersect by driving or sinking.

**Costenning.**—Discovering the situation of a lode by sinking pits in its vicinity, and driving transversely to intersect it.

**Cofering.**—Securing the shaft from the influx of water by ramming clay, &c., around the sides of the timber.

**Dam.**—(*C*)—Choke damp; foul air.

**Dawdling.**—(*G*)—Residue of copper in the process of separating silver from copper in the liquation process.

**Dead-work.**—Work where the vein is not productive, or work which is done without obtaining any ore.

**Deads.**—Rubbish; attle; veinstone barren of ore.

**Dialling.**—Mining engineering; surveying within a mine.

**Dish.**—(*C*)—That portion of the produce of a mine paid as rent to the owner or lord.

**Dissuening.**—Breaking down the strata from one of the walls of a rich and narrow vein, so that it can afterwards be taken down without loss or waste.

**Dropper.**—A branch which leaves the main lode.

**Drowing.**—Excavating in a horizontal direction; opposed to sinking or excavating in a vertical direction.

**Droft.**—Horizontal excavation

**Dress.**—To clean the ore by breaking off fragments of the gangue from the valuable ore.

**Elvans.(C).**—Dikes of granite and feldspar; porphyritic rocks cutting the slates and granites of Cornwall.

**Engine-shaft.**—The shaft by which the water is drawn from the lowest portion of the mine.

**Feeder.**—A branch falling into the main lode.

**Fault.**—A sudden interruption of the continuity of strata.



in the same plane, accompanied by a crack or fissure of a width varying from a mere line to several feet.

*Flucon.*—Decomposed, clayey matter, accompanying the slides and cross-courses, and sometimes the lode itself.

*Foot-wall.*—The wall on the lower side of the lode.

*Gangue.*—The non-metalliferous portion of the lode; the mineral substances accompanying the ore.

*Gad.*—A pointed wedge of a peculiar form, having its sides of a parallel figure.

*Garkupfer.*—(G.)—Refined copper.

*Glist.*—(C.)—Mica.

*Good levels.*—Nearly horizontal levels.

*Gossun.*—Oxide of iron, intermixed with quartz, generally found near the surface, in the lode or accompanying it.

*Grass.*—The surface; the open air.

*Grown.*—(C.)—Decomposed granite.

*Ground.*—The rock which is adjacent to the lode; the strata in which the lode occurs.

*Gulph of ore.*—A very large deposit of ore in the lode.

*Hanging-wall.*—The wall or side above the lode, in contrast-distinction to the foot-wall.

*Heave.*—The horizontal dislocation which occurs when one lode is intersected by another having a different direction.

*Horse.*—The dead ground between two branches of a lode.

*Joggling-table.*—Inclined board, and which is made to move with a sudden and quick motion, used in washing the ores.

*Jig.*—To separate the ore with a riddle wire-bottomed sieve, the heavier substance sinking to the bottom of the sieve.

*Junction.*—Point where two veins, or different rocks, unite.

*Keave.*—A large vat.

*Kibble.*—The bucket in which the ore and attle are sent to the surface.

*Killas.*—(C.)—Clay slate.

*Kupfer-stem.*—(G.)—Regulus from copper-lead ores twice roasted.

*Lander.*—The man who attends at the mouth of the shaft to receive the ores as they are sent to the surface.

*Leader.*—A branch of the main vein.

*Levels.*—Galleries driven on the lode at various depths, generally at intervals of ten fathoms.

*Lifters.*—Wooden beams to which the stamp-heads are fastened.

*Lode.*—Regular vein producing ore.

*Loupe.*—(F.)—Bloom, from the puddling furnace.

*Malle.*—(F.)—Regulus, melted sulphuret.

*Mock lead.*—Blende, sulphuret of zinc.

*Moor-stone.*—(C.)—Granite.

*Mundic.*—(C.)—Iron pyrites.

*Needle.*—A long, tapering piece of copper used in tamping the hole for blasting, in order to leave a cavity for inserting the safety-fuse.

*Pack.*—Gang, or party of men.

*Parcel.*—A heap of ore ready for sale.

*Pass.*—An opening left for letting down stuff to the level.

*Peach.*—(C.)—Chlorite.

*Pick.*—A common instrument for mining and agricultural purposes.

*Pillar.*—A piece of ground left to support the hanging wall.

*Pitman.*—One employed to look after the lifts of pumps and the drainage.

*Pit-work.*—The pumps and other apparatus of the engine-shaft.

*Point of the horse.*—The point where the lode splits or divides into two parts.

*Pot-grown.*—(C.)—Soft decomposed granite.

*Prion.*—(C.)—Soft, white clay, esteemed in Cornwall a favorable sign, when found near a lode.

*Rack.*—An inclined frame on which ores are washed.

*Riddle.*—A sieve for washing the ores.

*Rosette.*—(F.)—Dish of refined copper taken off from the surface by throwing on cold water.

*Run of a lode.*—Its direction.

*Saalband.*—(G.)—Plural *saalbander*, selvages, or thin bands of earthy matter, generally argillaceous, on each side of the vein next the wall-rock.

*Sett.*—The portion of ground taken on lease for mining purposes.

*Schlich.*—(G.)—Finely pulverized ore mud.

*Slag.*—Silicious substances formed in the various processes of smelting and refining, principally silicates of the protoxide of iron, alumina, lime, and magnesia, generally containing a small portion of various metallic substances.

*Shaft.*—A vertical or inclined excavation in the lode or through the country.

*Spleissofen.*—(G.)—Copper refining furnace with two receivers for the fused metal.

*Shears.*—Apparatus for raising or lowering heavy articles in the shaft.

*Shelf.*—The solid rock.

*Shoddy.*—Tracing the situation of a lode by means of the loose masses of ore and veinestone which have been separated from it and scattered in its neighborhood.

*Shooting.*—Blasting with gunpowder.

*Sinking.*—Excavating downwards in the shaft.

*Slide.*—A vertical dislocation of the lode.

*Stickensides.*—Polished, argillaceous surfaces of the rock, caused by the rubbing and grinding of large masses against each other.

*Stockwerk.*—(G.)—An assemblage of small irregular strings of ore, which has no regular form like a true vein, but in which the ore seems to have been disseminated through the fissures in the rocks.

*Stimes.*—Metallic ores mixed with finely-communited particles of the rock.

*Smelt.*—The reduction of metals from their ores by the aid of heat, in the usual metallurgic treatment in the large way, is called smelting.

*Sollar.*—The small platform at the end of a certain number of ladders.

*Spilling.*—Breaking up the rock into small pieces for the purpose of separating the ore.

*Stamp.*—To break up the ore and gangue by machinery, with the aid of water, for the purpose of washing out the heavier metallic particles.

*Stamp-head.*—The iron end of the beam which by its weight breaks the fragments of ore in the process of stamping.

*Slope.*—To excavate the space between two levels by a succession of step-like workings.

*String.*—A small vein.

*Stuff.*—Attle, or rubbish.

*Sump.*—The bottom of the engine-shaft, into which the water is allowed to run, and from which it is pumped or removed by some other means.

*Tackle.*—The windlass, rope, and kibble.

*Tamping.*—The substance with which the hole in blasting is filled after the charge of powder has been introduced; also, the process of filling the hole is called tamping.

*Thrown.*—A lode is said to be thrown up or down when it is intersected by a slide by which a portion of the lode has been removed from its original position to one side or the other.

*Ticketings.*—(C.)—The weekly public sales of ore.

*Tribute.*—The system of working by tribute is that under which the workman receives a certain proportion of the ore which he raises as a return for his labor.

*Trunk.*—A long narrow inclined box, in which the separation of the finely-washed ore from the earthy impurities is effected.

*Tunnel-head.*—The top of a furnace, where the materials are put in.

*Tut-work.*—Work in which the laborer is paid in proportion to the amount done—generally at so much per fathom in driving or sinking.

*Tuyere.*—Pipe through which the blast is introduced into the furnace.

*Underlie.*—The dip or deviation of a vein or bed from the perpendicular.

*Van.*—To cleanse a small portion of ore by washing away the earthy matter, by the aid of a shovel or some similar implement.

*Vein.*—The contents of a fissure in the rocks, of indefinite length and depth.

*Vug.*—(C.)—A cavity in the vein, generally lined with crystals.

*Wall.*—The side of the rocks adjacent to the vein.

*Washing.*—The process of separating the ore from the earthy impurities by the aid of water, the particles of ore and earthy matter arranging themselves in different positions according to their different specific gravities.

*Whim.*—A machine consisting of a drum revolving vertically by horse, steam, or water power, by which, with the aid of a rope and pulley, the ores are raised from the bottom of the mine.

*Whim-shaft.*—The shaft through which the ore is raised by means of a whim.

*Whip and derry.*—The simplest method of raising the kibble by means of a single pulley; the kibble is attached to a rope, which is drawn by a horse.

*Winze.*—A shaft sunk from one level to another, for ventilation, or for proving the vein. A winze differs from a shaft in not being open to the surface, like the latter.

*A VALUABLE REMEDY.*—The Boston *Cultivator* says: "Every family should keep a small quantity of chlorate of potash, (but with great care, as it is one of the most explosive salts known, burning with great heat. Especial care should be had not to allow it to become mixed with dust or charcoal or sulphur, and it should not be exposed to friction.) We have never found anything equal to it for an ulcerated sore throat. Dissolve a small teaspoonful of it in a tumbler of water; and then occasionally take a teaspoonful of the solution, so as to gargle the throat. It is nearly tasteless and not at all offensive to take; hence it is well adapted to children.

Nothing is better than this for chapped or cracked hands. Wash them in a weak solution, and they will soon be well. It is also good for a rough, pimply, or chapped face. It may be had at any druggist's.

## A SCHOOL OF MINES.

Some months since we prepared several articles for the Press upon the necessity of the establishment of a "School of Mines" at some point on the Pacific Coast. The only paper that seconded our efforts in that direction, so far as to even allude to such a project, was the *Washoe Times*, edited by GEN. ALLEN, a gentleman of an enlarged and comprehensive mind, who seems fully to understand our necessities in this particular. Some recent editorial remarks in the *Times* have brought out a communication to that paper upon the subject from which we extract as follows:—

"I would respectfully suggest that such an institution as a 'school of mines,' should be conducted upon the most liberal and extensive scale practicable, in order to make its utility appreciable to the community at large. The vast utility of such an institution as this, if properly conducted, must be of equal benefit to the mill owner and the miner; as the miner, for instance, often finds rock, of the quality of which he is in entire ignorance; this he would bring to the 'school of mines,' where he could learn whether it were worth his time and labor to prospect it. The mill owner receives rock to reduce, with the quality of which he is not familiar; he would accordingly go to the 'school of mines,' where he could not only be informed of the character of the material, but also the best way of treating the same to the most profitable results. Such an institution should most certainly commend itself to all classes of society, both in this Territory, California, and all those interested in the development of the mineral resources of this western world, at least. It would be idle to expatiate upon the details of so important a step as the one you have proposed, until it is seen how the public will appreciate your most valuable suggestion. It is strange that this mineral portion of the continent should have blundered on so long without an institution of this kind, which must at once suggest its importance to even the least reflective mind.

We have a vast country around us, and travel on which ever point of the compass you may, you find a country charged to repletion with mineral wealth, which only requires talent and industry to develop. It is a subject of the most vital importance that labor should not be uselessly applied, and that there should be some guiding power that the miner could have immediate access to, which would direct his course, and from which he could ascertain the probability of the results of his hard work. There is no institution, in a society constituted as this might be, that could have so large a field of usefulness, and one whose influences would be more generally beneficial to all portions of society as the one you have suggested. The capitalist would receive as much benefit as the poorest member of society; he would be able to inform himself as to the nature and value of the mineral for the development of which he was called upon to advance his money, and thereby lessen his risk. The miner would know what he was likely to expect from the labor he was bestowing upon his discoveries. The mill owner would be in no doubt as to the treatment of the various ores that might be brought to him for reduction. We should cease to hear of any one saving their tailings for the purpose of reworking them, and subjects that appear now blindly speculative would, by the aid of such an institution, be made profitable to the whole community.

Wishing your efforts in this direction every success that this vastly important subject demands and deserves, and at the same time not wishing to be placed prominently forward, but willing to afford all the aid my poor ability can in its promotion, and anxious to co-operate with any other gentlemen who may be of the same way of thinking as myself, I remain

Yours, respectfully,

JACKSON BARWIRE.

## CAVITIES IN PRECIOUS STONES.

The Philosophical Magazine furnishes an exceedingly interesting paper by Sir D. Brewster, on cavities observable, by microscopic power, in diamonds, topaz and beryl. Several years ago the learned author discovered in these cavities two new fluids of different density. One of these, named cryptoline, is fixed and oily; the other Brewstoline, is volatile.

From the several curious observations and facts recorded in that paper we extract the following:

"In the Koh-i-noor diamond, which the Prince Consort kindly permitted me to examine in 1852, I found three black specks, scarcely visible to the eye, but which the microscope showed to be irregular cavities, surrounded with sectors of polarized light. In the two smaller diamonds, which accompanied the Koh-i-noor, there were also several cavities surrounded with luminous sectors, and the same polarizing structure which indicated the operation of compressing and dilating forces. In order to obtain more information on this subject, I examined nearly 50 diamonds lent me by Messrs. Hunt & Roskell, and in almost all of them I found numbers of cavities of the most singular forms, round which the sub-



stance of the stone had been compressed and altered in a remarkable manner. The shape of the cavities sometimes resembled those of insects and lobsters, and the streaks and patches of color in polarized light were of the most variegated kind. In examining a large number of diamonds, which adorn some of the oriental objects in the East India Co's Museum, I found that all these stones contained large cavities, and were coarse or flawed diamonds, which could not be cut into brilliants, or used in rings, or other ornaments. It seems, indeed, to be a general truth, that there are comparatively few diamonds without cavities and flaws, and that this mineral is a fouler stone than any other used in jewellery.

Some diamonds, indeed, derive their black color entirely from the number of cavities which they contain, and which will not permit any light to pass between them." Further on he says: "The discovery of pressure cavities in topaz and diamonds may be considered as completing the evidence for the igneous origin of these minerals, and of the rocks which contain them. We know that gas in a state of compression exists in minerals. \* \* \* The gas in these cavities, being exposed to a change of temperature while the substance is still in a plastic state, compresses it and gives it that variation of density which produces four luminous sectors in polarized light."

#### LAKE SUPERIOR COPPER.

The Copper mines of Lake Superior were first brought into public notice in 1845, when speculation was rife in all that part of the Porcupine mountains on the south shore of Superior, extending far into the lake, having for its base a line drawn across L'Arche Bay to Ontonagon. This was then the Northern Eldorado. In this year operations were commenced at the Minnesota mine which is about fifteen miles back of Ontonagon. The first large mass of native copper weighing about seven tons, was found in a pit dug by the original lords of the soil. It is now only fourteen years since this mine was opened. At that time the rapids in the Sault St. Marie prevented the passage of vessels from the lower lakes and the adventurers that sought out this new Eldorado had many obstacles to overcome. The country was then covered by a vast wilderness, without inhabitants, except a few Indians. All supplies were brought from the lower lakes, then had to be passed over the Portage at St. Mary, and thence carried in frail vessels coasting to the westward hundreds of miles to the copper regions, and then carried on the back of man and beast to the supposed places of the copper deposit. Every stroke of the pick was made at a cost ten fold more than in a populated district, every disaster delayed operations for weeks and even months.

The opening of the St. Mary canal, in 1856, has produced a wondrous change in all of this wilderness region. The only settlements on the south shore of the lake at the present time are Marquette, Portage Lake, Ontonagon, Copper Harbor, Eagle Harbor, Eagle River, and the adjacent mines, —all else is a vast wilderness without sign of human habitation.

The Copper region is divided into the three districts of Ontonagon, Keewenaw Point and Portage Lake. Since 1845, 120 Copper Mining Companies have been organized under the general Law of Michigan, more than six millions of dollars have been expended in explorations and mining improvements. The Minnesota Cliff mines have declared and paid over two millions of dollars in dividends since the organization and working of these companies.

Until 1860 all the Copper of Lake Superior mines was smelted at Detroit, Cleveland and Boston. Since which time a Boston company have erected smelting works at Portage Lake Superior, while some Copper ore has been shipped to Liverpool and smelted there.

#### TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metalliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a

pan is an invariable test. If in rock of any description; that rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphuret ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector. These articles will be published under the head of "THE MINER'S LABORATORY," and will be found of great value to the mining public. [*Mining and Scientific Press, April 20.*]

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MIN-

ING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the Press for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

#### MINING AND SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

#### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

#### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietor having had great experience as a Patent Agent, together with facilities at Washington that enable him to obtain Patents with dispatch.

#### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as each number will contain several original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

#### To Chemists, Architects, Millwrights and Farmers!

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

#### Terms.

To mail subscribers:—Four Dollars per annum

#### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

#### To Printers.

AN INTEREST in one of the most flourishing and best paying Newspaper Offices in the mountains is offered for sale on easy terms. A rare opportunity is hereby presented to any printer desirous of establishing himself in a good business in one of the healthiest, most thriving and delightful mountain towns in the state. For further information enquire at this office.

#### Our Mint, its Rules, Charges and Operations.

#### For parting silver from gold when gold

is below 300-1000ths. fine ..... 3cts per oz.  
" from 30-100ths. to 750-1000ths fine. 7 cts " " oz.  
" " 750-1000ths to 950-1000ths " 14 cts " "

#### DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce ½ per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " " "

#### DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents per standard ounce, ½ per ct. gross value of silver for making bars; also when gold is contained ½ per ct. on gross value of gold for coining. Refining charges as in purchases.

#### BARs SOLD FROM REFINERY.

\$1 21cts. per standard oz. ½ per ct. gross value to be added for making bars.

#### DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. per standard oz. ½ per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

#### DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz. ½ per ct. gross value of deposit for making bars.



## GIFFARD'S INJECTOR.

No modern improvement has excited more general attention among engineers than Giffard's Injector, for supplying boilers with feed water, without using a force pump. Although simple in construction, it is apparently inexplicable in its operation, leading the observer to infer that its discovery must have been accidental. It was however the result of scientific investigation by M. Henry Giffard of Paris, who enunciated its theory in 1850, eight years before its introduction into practical use, and again, in a recent work in the French language, has fully illustrated the principles of its manufacture and application. Various explanations of the Injector have been published, but usually with an array of mathematical formulæ, which, to many practical engineers, are more mysterious than the instrument itself. Those who desire an algebraic analysis will find the same in the Journal of the Franklin Institute for May, 1860; but inasmuch as the principle is simple, we present an explanation without mathematical formulæ, by aid of an illustration.

Take a boiler under pressure of steam of 100 lbs. per square inch, with an orifice one inch in diameter, opening from the steam space. The steam would rush out of that opening at a very high velocity, sixteen times faster than water would issue from an opening lower down in the boiler. This we know from established rules. If the issuing steam, at the moment of its exit, could by some means be instantly condensed, it would become a jet of water of one fourth of an inch in diameter; but still possessing the same high velocity. Now suppose that below the water line we make an opening, one-fourth of an inch in diameter, from which there will issue a jet of water; and further let us conduct the former condensed jet by a pipe so that the two jets will play against each other; it is plain that the condensed jet will stop the other and penetrate into the boiler; because it moves sixteen times faster than its opponent.

This is analogous to what occurs in the operation of the Injector: the steam issuing from the muzzle of the perforated tube, being condensed by contact with the cold water, becomes a jet of water of high velocity, which would penetrate into the boiler as above illustrated, with this difference only—that, in the act of condensation, the condensed jet combines with the water that surrounds it, and carries it along the feed pipe into the boiler. The velocity of the compound jet is of course much less than that of the simple condensed jet, but there is still a large margin of force in favor of its entrance in the boiler.

We are not aware of the exact utmost excess of force in the Injector jet, but we know by experiment that an Injector, taking steam from a boiler at 60 lbs., will force water into another boiler at 98 lbs. pressure.

This valuable invention is in extensive use in Europe and the Atlantic States, and during the past two years, in its introduction on the Pacific Coast, has met with the approbation of our engineers, in all cases.

## THE NORTHERN MINES.

The Dalles Mountaineer of late date says that the reports from all parts of the mines of that section, are most cheering. The resident population has been pretty thoroughly sifted of its chaff and those who remain are workers. The adventurers who never rest easy, and who always expect to make a "pile," but never do, have left. The mining season has fairly opened in all parts of the country. In some districts the snow has not entirely disappeared, but operations are going on in spite of obstructions. The gold crop will be much larger than that of any previous season; and promises to rival California in her primeval days. Ditches have been dug and water has been brought to localities that heretofore have been destitute of that necessary article. This has been particularly the case at Auburn, Oro Fino, Elk City, and Florence, from each of which places it is confidently believed there will be a steady stream of gold. At Auburn, the supply of water, as has been stated by a correspondent, is still limited, and by no means adequate to the wants of the miners, but despite this obstacle, Powder River will show a large gold yield the present season. At Elk City and Oro Fino, they will have water for ground sluicing or hydraulic operations, and in that way claims that have hitherto been unproductive, will be

made to yield largely. At Canyon City, one of the richest mining districts in the whole Northern country, the facilities for procuring water have been greatly improved, and it is estimated that the yield from that locality alone will be many thousand dollars. These mines paid well the short time they were worked last season, and with improved facilities there is every reason to believe that they will more than realize the expectations of those who have been most sanguine as to their richness. The great drawback to the prosperity of the mining districts has been the restless character of the population. Too much time has been spent in prospecting, and too little industry applied to the working of the claims.

## GOLDBEARING SULPHURETS, AGAIN.

MR. EDITOR:—The correspondent of the Washoe Times, whom you quote in your paper of the 15th instant, pretty freely condemns certain processes for treating sulphurets. They do not come up to his "ideas." These, he says, he merely introduced in a series of papers; but his description of his own plan leads some to ask, "Can it be anything more than an idea?"

He separates iron from sulphur and fixes oxygen on the iron in the presence of sulphur and of arsenic, which remains unaltered. At what temperature is this possible? Perhaps he never thought of this; for heat seems to be a stumblingblock throughout his calculations. To prove the loss of silver volatilized in roasting sulphurets, he experiments at a white heat!

I this writer ever roasted at a white heat, his ideas of the loss he incurred are doubtless of weight.

Again, according to his "ideas" "sulphurated, arsenicated hydrogen" passes to "flour of arsenic" on reaching air.

Is this effected at a low temperature? if so, what is "sulphurated, arsenicated hydrogen"? Is it like "sulphurous acid contained in the ore"—ready made?

As a writer, this correspondent can make much of little; as a roaster he might neglect the silver and avoid the arsenic. Where is the gold? Is there little, where there where there should be much?

Yours, &c., A POOR CHEMIST.

ERRATA.—In an article headed "THEATRICAL", on the 5th page of our last issue, "The singing is of the first-class character, with the solitary exception, perhaps, of a little too much instrumental accompaniment," should have read, "The singing is of first-class character, with the solitary exception, perhaps, of a little too much instrumental accompaniment."

MINING GLOSSARY.—We devote a large space, in our columns to-day, to a very carefully prepared, and very full mining glossary. We extract it from Foster and Whitney's Report upon the Lake Superior Copper Mines. It will be found very valuable, to all miners, for occasional reference, and occupies a legitimate position in our "Miner's Laboratory."

CORRECTION.—In our issue of last week we alluded to the Stone Breaking Machine, at the foot of Market Street, in this city, as the one known as "Blake's Stone Breaker." We wrote from hearsay, but have since examined the same, and find it is something of very different construction, but an excellent machine for the purpose to which it is applied. The machine is manufactured in this city at the Pacific Foundry, by Goddard & Co. We shall notice it more fully, at some future time.

We were also in error with regard to the Foundry where the "Young America Quartz Crusher" can be obtained. That machine is also made at the Pacific Foundry, where several may now be seen, which have been constructed for a Mine in Mexico.

REMOVAL.—J. C. E. Kleyzig, & Co., have removed from their old stand on Battery street, to 733 Washington street, near Kearny. Sportsmen and others requiring anything in their line will do well to give them a call. See advertisement.

## THE MINING SHARE MARKET.

There has been some improvement in the Mining Share Market during the past week, produced by favorable reports from several leading mines. A fair amount of business has been transacted and some little excitement experienced. The disposition to sell on the part of those who hold stock of intrinsic value, is constantly diminishing, and so far as they are able, all such are regularly paying up their assessments, and closely watching the development of their mines. Mining operations, on Montgomery Street, are fast becoming a legitimate business.

Gould & Curry, which opened the week at \$5500, has gradually advanced to \$6100. Twelve shares have been sold at the latter figure. This important advance has been produced by information from the mine, that in a tunnel 200 feet lower than the mine has hitherto been worked, a fifteen foot ledge has been struck, averaging \$500 to the ton.

Ophir shares have also materially improved during the week, and are now quoted at \$2400, with considerable sales and more enquiry.

Savage was quoted on Saturday at \$4000, an advance of \$1200 during the week. A large number of transactions in these shares were reported during the week, at gradually advancing rates.

Chollar, has had an even Market, with small transactions. Potosi, sold at \$460; no new features.

Wide West has attracted some attention, during the week, 251 shares having changed hands at \$175 @ \$216.

## THE COPPER INTEREST.

We have nothing new, of special interest, from Copperopolis during the last six days. The Union claim has three shafts sunk to a considerable depth, from each of which they are taking large quantities of rich paying ore. At each of these shafts is a steam engine for hoisting the rock. Immense piles of what is called number three are lying at each of the shafts—too poor for transportation until it is reduced. It is estimated that there is more than \$100,000 worth of this number three rock now on the surface of the Union claim.

The Keystone is now under the working direction of some skillful and energetic copper miners, who intend to prosecute operations with energy. We learn that 1,000 workmen will probably soon be employed at this mine.

The Oriental, in Amador County, have thus far expended only about \$1200 upon their lead, and yet they have about \$5000 worth of ore upon the ground, and are seventy feet deep upon their mine. The Company is out of debt, small, and there is none of its stock in the market.

The mines of El Dorado, Placer, and Nevada, are still progressing, although we have not yet heard of any shipments of ore from that direction.

The Humboldt Register says: "The Sheba mill continues concentrating rock for shipment. Thursday, three six-mule teams started with concentrated rock to be shipped from San Francisco to England."

INDURATED PLASTER.—Objects in plaster of Paris may be rendered like marble by coating them one or more times as may be necessary, with a liquid prepared as follows:—2 pts. of stearine and 2 pts. of Venetian soap, are mixed with 20 or 30 pts. of cold solution of caustic potassa; and after a half-hour's ebullition, 1 pt. of pearl ash is added and the heat

MORE MINES.—New and rich gold and silver mines have been recently discovered in the vicinity of Carson City—a region where the precious metal has not been found hitherto, continued for a few minutes. Cold ley in sufficient quantity to produce perfect fluidity is then stirred in, and the liquid set aside for several days under cover.

Lost!—A Silver, Lever Watch, hunting case, supposed to have been lost on Bush Street; the finder will be suitably rewarded by leaving it at this office.

WANTED.—A full set of Patent Office Reports (Mechanical) Inquire at this Office.



FIRST FROM REESE RIVER.—Wells, Fargo & Co. made their first shipment of bullion from Austin, Reese River, on June 11th. It was twenty pounds, the result of one week's work in a small arrastra.

## GENERAL MINING STOCK REPORT.

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending June 20, 1863.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WARRANT STOCKS.</b>									
Ophir	16,800	12	\$300	2 75	2100	—	2300	2200	—
Gold & Curry	4,800	4	500	50.20	5300	6500	5800	5850	6050
Central	1,800	12	300	—	—	—	—	—	—
California	3,800	12	300	—	—	—	—	—	—
Chollar	5,000	4	500	505	505	505	505	505	505
Potosi	2,800	500	400	431	440	425	450	465	465
Hale & Norcross	3,000	1	500	800	800	900	850	1100	—
San Francisco	3,000	1	500	49	47 1/2	47	45	43	—
Bancroft	8,000	4	500	375	380	375	370	350	—
Burns & Moscov	4,800	2	100	160	163	164	163	165	167
North Potosi	2,000	1	300	31	26	33	—	30	30
Rogers, F. D.	3,000	1	250	—	—	—	—	—	—
Meredith	7,200	2	125	33	—	20	20	20	—
Charles Caney	1,800	1	30	80	80	85	85	—	75
Sacramento	1,800	1	500	—	—	—	—	—	—
Lacoma	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	2075	—	—	2850	3400	—
Iowa	—	1	—	—	—	75	90	85	—
El Dorado	—	1	—	50	50	—	70	70	—
Notion	1,600	1	—	19	15	16	15 1/2	15	—
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	—	20	19	18	10	11
Adriatic	—	—	—	—	—	6	4	—	5 1/2
Brennus	—	—	—	—	—	19	—	—	19
Cedar Hill Tunnel	10,000	1	100	2 1/2	3	2	—	2 1/2	—
Mount Davidson	10,000	1	200	4	3	—	3 1/2	3 1/2	—
Pride of the West	—	—	—	—	85	90	75	93	90
G. G. Quarz M. Co.	—	—	—	—	—	—	—	—	—
Imperial	—	—	—	—	—	—	—	—	—
<b>ESMERALDA STOCKS.</b>									
White West	2,600	1	600	195	203	197 1/2	180	175	180
Antelope	1,200	1	500	—	—	—	—	—	215
Emeralda	1,600	1	1000	15	15	18	15	—	—
Real Del Monte	4,400	1	400	110	105	110	115	100	120
Alma	1,300	1	100	—	—	—	—	—	—
Utah	1,600	1	250	7 1/2	7 1/2	—	—	—	—
Silver Hill	3,000	1	500	34	34	34	34	34	34
Nevada	1,200	1	250	—	—	—	—	20	20
Federal Hope	—	—	—	—	—	—	—	—	—
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	—	—	—	—
Falls of Clyde	—	—	—	9	—	—	—	—	—
Sanborn, S. W. ex.	—	—	—	—	—	—	—	—	—
Bamboo	600	1	500	65	53	55	52	52 1/2	56
<b>COPPER STOCKS.</b>									
Jacqueline	4,800	2	250	10	10	—	10	—	6
Coco	3,600	1	600	—	—	—	—	—	—
Willow Springs	2,700	1	400	—	5	5 1/2	6	—	5
Empire	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	—	1000	—	—	—	—	—	—
Don Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	—	—	—	—	—	60
Jacqueline	—	—	—	—	—	—	—	—	—
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	—	—	—	5	4 1/2	4 1/2	4 1/2	4 1/2	4
Utah	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	—	—	—	—	—	—

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, June 18, 1863.

Bid.	Ask'd	Bid.	Ask'd
<b>Virginia Mining District.</b>			
Ashland	\$ 9	10	—
Allon	90	100	—
Atkinson	150	—	—
Atkins	3	5	—
Baldwin	25	30	—
Barnett	35	40	—
Barnett and Golden Era	30	35	—
Burnside	18	20	—
Burns & Moscov	150	160	—
Beach-Paxton	90	100	—
Bloomfield	5	7	—
Cassius (Buchanan)	—	250	—
Cedar Hill Tunnel	15	20	—
Coe	15	20	—
Commercial	15	20	—
Consolidated Cedar Hill	3	3 1/2	—
Durham	3	5	—
Empire	—	6	—
Edwards	90	100	—
Fairview	200	225	—
Grass Valley	50	60	—
Hazel Green	5	7	—
Harrison, Virginia Incorpor	15	20	—
Harrison San. Fran. Inco.	—	15	—
Irving	—	10	—
Insurance	25	30	—
Iowa	115	120	—
Ironside	5	6	—
Indus	10	12	—
Juniata	7	10	—
Keystone	25	30	—
Kenesha	8	10	—
La Crosse	9	10	—
Lumber	10	12	—
Sierra Nevada	\$ 55	60	—
Sacramento	65	75	—
Shamrock	—	15	—
Texas	—	100	—
Union	—	100	—
U. S. Tunnel	—	65	—
Utah	—	70	—
Old Virginia	—	250	—
Washington	—	5	—
York	—	6	—
Zouave	—	17	20
<b>Gold Hill District.</b>			
Alpha	—	750	—
Battle	—	16	20
Bullion	—	75	80
Belcher	—	1000	1200
Branch Mint	—	7	—
Caledonia	—	35	40
Coppers	—	6	8
Eureka	—	20	22
Forcade & Ricard	—	8	8
Gold Hill, Big Ledge	—	50	60
Golden Gate	—	5	—
Golden Eagle (No. 1)	—	12	15
Hawkeye	—	20	25
Hudson	—	200	250
Isaac	—	150	175
Leon	—	150	175
Laboring	—	12	15
Lacerte	—	18	—
Mary Ann	—	35	40
North American	—	35	40
North Ophir	—	3	4
Overman	—	100	200
Oriental	—	5	—

## REMARKS.

The Virginia Market has been exceedingly dull since the date of our last reference, and except upon the Main, or Comstock range, there has been something of a decline, as will be observed by our quotations. Prospecting, however, is progressing energetically, and very encouraging developments are being made on what may be denominated outside ledges.

In Gold Hill stocks, much more feeling is manifested, and a very general advance is occurring. During the past two months, developments of a very satisfactory character have been made in this district; nor are they confined to the "main range." The back ledges are beginning to yield with fair promise. But along the "main range," and the three ledges constituting it, discoveries are daily being made giving rise to the wildest predictions. The ledge upon which the Belcher is located, is indisputably one of the very richest in the Territory. It is the ledge lying east of the Crown Point vein. Notwithstanding the occupancy of the same ground by the Koh-i-noor, the Belcher is held firmly at the advanced quotations given. This same rich vein runs, it is presumed, through the Leon, and has been struck in the claims of Gold Hill proper, the Princess and the Bullion. This ledge is, without the shadow of a reasonable doubt, entirely distinct from the back ledge. That they are one, is the theory upon which are based the suits between the Yellow Jacket and Princess and Union, and the Belcher and Koh-i-noor. We refer the reader to our figures for further information.

## ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, June 16, 1862.]

Bid.	Ask'd	Bid.	Ask'd
Alpine	\$4	10	—
Amador	—	5	—
Arland	—	10	—
Arctide	6	10	—
Antelope	—	10	—
Alturas	10	—	—
Alta	—	—	—
Brazili	15	20	—
Rodriguez Consolidation	—	12	—
Bodie Peak, Bodie District	—	8	—
Bright Star	10	15	—
Bamboo	65	—	—
Bullion (Van Horn Dist.)	—	10	—
Bodie Bluff, No. 1	8	12	—
Bodie Bluff, No. 2	—	5	—
Bunker Hill	—	10	—
Donaparte, Tunnel comp.	—	30	—
Climax	—	10	—
Crockett	85	125	—
Cape	—	5	—
Clan Alpine	12	20	—
Davis, consolidation	—	5	—
Durham	—	9	—
Delta	—	—	—
East Essex Ex. Ural	—	12	—
Excelsior, Excelsior Dist.	3	10	—
Empire	20	—	—
Franklin, Tunnel company	10	—	—
Fallstaff	20	—	—
Fallstaff, Consolidation	4	5	—
Fresno	9	12	—
Falls of Clyde	—	8	—
Great Eastern	15	20	—
General Hooker (Cov.)	14	25	—
General Jackson	13 1/2	14	—
Garibaldi	35	50	—
Golden Harvest	—	5	—
Golden Cross	—	12	—
Governor Seymour	—	25	—
Golden Age	32	45	—
Great Britain	6	9	—
"Golden Era" Tunnel Co.	2	3	—
Greenback	20	35	—
Hanover	—	10	—
Howard Tunnel Co.	10	15	—
Heath	12	15	—
Homer	15	16	—
Homo Check, Excelsior Dis	3	5	—
Juniata	10	18	—
Keene	—	1 1/2	—
Kennedy	—	45	60
Cincinnati	—	25	30

## REMARKS

The "Crockett" Ledge on Last Chance Hill is still increasing in richness.

The last crushing of 22 tons paid \$3,189, averaging \$145 per ton; the shaft is now down to a depth of 50 feet, and

the ledge over five feet wide. The company have a large amount of very rich rock at the shaft, which is being hauled at Stark & Tucker's Mill. The owners in the claim are not disposed to offer any of the stock for sale; 15 shares were sold on the 9th at \$85 per share.

The "Clan Alpine" ledge on Last Chance Hill, a recent discovery, is proving very rich. The rock assays \$1700 per ton. The company have taken out about thirty tons of rock, which will be crushed immediately. The owners in the ledge are sanguine that the rock, without assorting, will pay over \$200 per ton; \$12 per foot was offered yesterday and refused. The ledge is about two feet wide and increasing in thickness as they go down.

The "Mary L. Gardiner," on Silver Hill, contiguous to the Young Winnemucca, is proving to be a very rich ledge; the shaft is down about thirty feet, and the ledge over four feet wide. The company have taken out about forty tons of rock, which will be crushed at Stark & Tucker's Mill. The last assay went over \$7,000 per ton; \$100 per share has been offered and refused for the stock.

The "Princess Royal" and "Geraldine" claims on Silver Hill, are also turning out rich rock. The work on both claims is being vigorously prosecuted, and from every indication from the rock now being taken out, the owners will be richly rewarded for the money and labor expended on the claims.

THE METROPOLITAN.—On Friday night, by the remembrance of our friend Warren, we enjoyed the pleasure of being present at the Hook and Ladder benefit. The house was not so full as we had hoped to see, or as the performances deserved. The Bianchis, and Grossi were in splendid voice. Amidst much good singing we thought Mme. D'Ormy's, taken altogether, was unquestionably the most finished we have heard in this city. She is not yet appreciated. We have been too long accustomed to screaming and bawling, to realize at first, the beauty of D'Ormy's voice, the assured ease, and perfect grace of her execution. Her time, however, will come. Mrs. Edwin and Mrs. Judah were good as usual. We wish the boys success.

MAGUIRE'S OPERA.—The present has been, indeed, a star week at this house, offering a combination of talent seldom brought before the public on this coast. To individualize, where all deserve praise, were invidious; but we cannot refrain speaking of Mrs. Hayne, Mr. Taylor, and the local favorite, Mayo, as they deserve. The Lady of Lyons, Romeo and Juliet, and the School of Scandal, we thought presented some exquisite and finished acting from each member of the combination. In many scenes of these pieces, criticism was disarmed. The educated and intellectual portion of our community, should by no means neglect visiting Maguire's, during this carnival of acting in California, for by doing so, they not only lose a rich feast themselves, but pay a poor compliment, to the energy and liberality of the Management, at present sparing no expense to merit their patronage. The legitimate drama is a great institution.

THEATRICALS.—At the Eureka, this week, the performances and the audiences have both been excellent. In addition to the general attractions of this favorite resort of mirth-loving people, O'Neill presents his "Irish Excentricities." Cotton's old "Uncle Snow," his favorite character, is a splendid piece of acting. Night after night he convulses the house. The other principal good things were "Running the Blockade," and Birch's "Pres-dig-a-ta-ter," both admirable burlesques. By the way, while Gideon's band at the Eureka, ridicule the poor Englishman's "h," we find Mrs. Mowbray at Maguire's continually using "don't never," and other American double negatives. Why not ridicule the more censurable error, or avoid it?

DASHAWAY HISTORIC.—We beg to call attention to the next Dashaway Historic, on this day week. It is enough to say one of the "indefatigable Badgers," takes a leading part. Seriously speaking, this is one of the best amateur clubs in the State, well worthy of patronage. Apart from a strong cast in the beautiful play of Ingomar, the entertainment concludes with a grand dance. The cause also is good, and with such a programme, we wish them a full house.



LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

## DIVIDEND PAYING MINES.

Name of Company	Locality of Mine	Secretary.	Locality of Office.
OPHIR .....	Virginia District.	Thos J. Lamb..	Rm. I, Express bldg.
GOULD & CURRY G & S	Virginia District.	Wadsworth ...	Lucas & Turner bldg.
IMPERIAL..... G & S	Gold Hill, N. Ter.	C. T. Hopkins..	45 Front street.
DANEY..... G & S	Esmeralda District	Joseph K. Bead	4 Armory Hall...

## PROGRESSIVE MINES.

[illegible]

Name of Company	Location of Mine	Secretary	Locality of Office
HALE & NORCROSS	Virginia District	J. F. Lightner	Metropolitan b'k.
HOPKINS	Humboldt Nev. Terr.	L. Franconi	Lucas & Turner b'g
HAWLEY	Devil's Gate Dist.	C. Stevens	6 Parrots Building
HATFIELD	Esmeralda District	J. H. Pickett	525 Montgomery st
HARRIS & S. M. CO.	Humboldt District	J. H. Pickett	525 Montgomery st
JACK HAYES	Esmeralda District	James Neary	326 Clay st.
JEWELL	Devil's Gate	J. H. Blood	7 Montgomery's B'k
JOSEPHINE	Coso District	Samuel Marx	610 Washington st
JASCO M CO	Sierra District	W. W. Lawton	400 Montgomery st
JEFFERSON	Gold Flat Nev Co	L. Maubec	716 Montgomery st
JANCASTER M & CO	Humboldt Co. N. T.	T. L. Bibbins	305 Montgomery st
KROOK	Humboldt District	C. Weitzner	612 Montgomery st
KOHLER	Humboldt Nev Terr.	L. Franconi	Lucas & Turner b'g
KOHLER, Bro's	San Antonio, L. C.	Kohler Bro's	Sansone street.
KOHLER	Esmeralda District	James Neary	326 Clay st.
LA BENCA M CO.	Sonora, Mexico	Chas E Kriebner	408 Clay street
LIVE YANKEE G & S	Slate Range District	W. W. Lawton	400 Montgomery st
LADY WASHINGTON.	Slate Range District	W. W. Lawton	400 Montgomery st
LUCKENY M'S G CO	Gold Hill District	W. V. Post	
LUKE ARMISTED	Sierra District	Charles Judd	Lucas & Turner
LILLY DALE	Star District	Joseph R. Beard	8 Army Hall
LA CRUCIATA M CO	Mexico	C. J. Brenham	Cor. Jack's & Fruit
LIVINGSTON	Esmeralda District	James Neary	326 Clay st.
IOWA	Virginia District	R. N. Van Brunt	706 Montgomery st
LATHROP T & M CO	Virginia District	R. N. Van Brunt	706 Montgomery st
LOCUSA	Silver City District	J. F. Pope	115 California st.
LONG OAK COPPER CO	Collier, Nev. Co.	F. E. Pattee	Merchist, mnt b'k
LONG	San Antonio, L. C.	Wm. F. Kilbuck	408 Montgomery st
LA PALMA	Lower Mexico	John W. Gould	408 Montgomery st
LA BUNCA	Sonora, Mexico	Chas Friedberg	408 Clay st
LADY BRYAN, G & S	Fluorine District	J. F. Bailey	605 Sacramento st
LACRE HILL Mlg Co	Tuolumne County	John B. Russell	410 Montgomery st
LILLY OF THE WEST.	Esmeralda District	T. L. Bibbins	305 Montgomery st
PLAYFLOWER, G & S	Esmeralda District	Win L. Duncan	Pioneer Building.
MACWICKIE	Slate Range	H. H. Clark	224 Montgomery st
MADISON	Slate Range	W. H. Clark	224 Montgomery st
MOUNTAIN VIEW & S	Slate Range	W. H. Clarke	224 Montgomery st
MELONES & STANLEY	Calaveras County	L. Franconi	Lucas & Turner b'g
MANZANOS L M Mfg Co	Sinaloa, Mexico	Th's Brownjohn	621 Clay Street
MOSS	Virginia District	R. T. C. Page	428 Montgomery st
MADISON	Virginia District	P. B. Cornwall	608 Merchant st
M. T. DAVIDSON G & S	Virginia District	E. A. Rabons	712 Montgomery's B'k
MEREDITH	Virginia District	F. E. Pattee	408 Merchant st
MEXICO	Mexico	H. H. Waterman	606 Montgomery st
MADISON, ST. RANGE	Slate Range	G. J. Turner	606 Montgomery st
MORAYE, G. S. & C.	La Paz, Colorado	G. J. Turner	606 Montgomery st
MIRBA	Esmeralda District	John Crowley	428 Montgomery st
MONITOR	Slate Range District	John Crowley	428 Montgomery st
MONTA CRESTO	Virginia District	E. B. Holmes	712 Montgomery st
METROPOLITAN COP.	Copperopolis	P. B. Cornwall	608 Merchant st
MADISON	Virginia District	P. B. Cornwall	608 Merchant st
MADISON	Virginia District	Joseph R. Beard	621 Clay street
MOUNT HOPE	Virgini. & Gold Hill	Thos Brownjohn	621 Clay street
MASHATTAN	Humboldt dist. u. t.	J. H. Gager	Merchist, mnt b'k
MINNA PERITA	Sonora, Mexico	P. J. Nourse	Lucas & Turners b'g
MIDMOUTH	Excelsior District	M. G. Elmore	328 Montgomery st
MIMUBADNA, Copper	Carmen Island	S. P. Howes	No 8 Wells Bldg
NORTH STAR	Humboldt, N. Ter.	J. H. Gager	Merchist, mnt b'k
NAPOLSON COP. & S	Calaveras county	R. C. Alden	420 Montgomery st
NAPOLSON COP. & S	Calaveras county	R. C. Alden	420 Montgomery st
NORLE C M CO	Calaveras county	E. A. Breed	656 Sacramento st
NORTH POTOSI	Virginia District	E. V. Joico	Cor. Bat. & Wash.
NORMAN	Virginia District	J. H. Brewer	40 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham	Front street.
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant st
NORTH	Virginia District	R. N. Van Brunt	706 Montgomery st
NEVADA COP. M CO.	Grass Val. Nev. Co.	Jno Armstrong	610 Merchant street
NEVADA	Nevada Distr. Cal.	S. Phinkham</	

Name of Company	Locality of Mine	Secretary	Locality of Office
SOTOMAYO . . . G & S	Esmeralda District	T. L. Bibbins . . .	305 Montgomery st
SONENCA . . . G & S	Esmeralda District	T. L. Bibbins . . .	305 Montgomery st
SUO . . . G & S	Esmeralda Dist.	M. G. Elmore . . .	528 Montgomery st
SAN ANTONIO . . . G & S	San Antonio, L. C.	P. Van Pelt . . .	312 Sansone st.
TABLE MOUNT COP. CO.	Calaveras County	M. G. Elmore . . .	528 Montgomery st
TACOMA . . . G & S	Lower California.	H. C. Kibbee . . .	at San-sane & Cal
TAKESSE . . . G & S	Virginia District	L. H. Blood . . .	7 Montgomery Bk
THURMON . . . G & S	Virginia District	W. E. Moody . . .	at Montgomery st
TRANS-MONTADE CO.	Stien Deuch Esma's	W. E. Moody . . .	706 Montgomery st
TITRON G & S M CO.	Virginia District	W. E. Moody . . .	418 Montgomery st
NIGHTINGALE . . . G & S	Cinnabar District	A. L. Chamberlin	712 Montgomery st.
TECHNICAL . G. & S	Colorado New Mex	E. B. Holmes . . .	608 Merchant st
TRUCKER Tunnel Co.	Esmeralda District	P. B. Cornwall .	708 Merchant st
TRUCKER . . . G & S	Esmeralda District	P. B. Cornwall .	708 Merchant st
UNITED STATES G & S	Esmeralda District.	S. R. Rooney . . .	7 & 8 Gov't House
UNION . . . G & S	Esmeralda District	John B. Russell .	410 Montgomery st
VILLANOVA MNG CO	Lower California	E. B. Holmes . . .	712 Montgomery st
VINTAGE S M CO . .	Simpson's Park.	E. B. Holmes . . .	712 Montgomery st
VIRGINIA ROGES CO	Virginia District.	E. B. Holmes . . .	712 Montgomery st
VIMBAR . . . E & S	Esmeralda District	James Neary . . .	326 Clay st . . .
WORDEN . . . G & S	Monitor District.	C. H. W. Wakelee	612 Merchant str.
WILLOW SPRINGS . .	Coso District . . .	J. H. Sayre . . .	224 Montgomery st
WASHOE . . . G & S	Gold Hill District.	D. A. Jennings	at Jackson, cor. Frnt
WATSON . . . G & S	Glade Range . . .	W. H. Clarke . . .	224 Montgomery st
WILSON FRIM G & S	Glade Range Distr	Henry Toney . . .	at Mont'm'y & cal
WHEOSHICK . . . G & S	Coso District . . .	Ed. H. . . st . . .	325 Montgomery st
WIDE WEST Mng Co	Esmeralda District	Coli Pean . . .	Lynch & Turners sg
WHITE & MURPHY . .	Virginia District	J. P. Nourse . . .	624 Montgomery st
WIMONA . . . G & S	Monitor District .	M. G. Elmore . . .	

A PIRATE'S SALARY.—The head gunner on the pirate Alabama, is one of the most accomplished artillerists that was ever in the British navy. He was paid off and got his discharge a few weeks before the Alabama sailed, and instead of enlisting in her Majesty's navy, took a commission on the pirate at the very round sum of two hundred pounds sterling a month, in gold, which, at the present price of rebel paper, is the moderate salary of forty two thousand dollars a year.

**A New Work—Important to all Mining Companies.**

Win. A. Andrews & Co., a new firm in New York, who propose to open a Pacific Mining Agency in that city, are preparing a work to be issued about the last of July, embracing a synoptical statement of all Mining Co's in this State and the adjoining Territories. It will be published in pamphlet form, and 50,000 copies distributed, *gratis*, in the Eastern States, with the intention of bringing Pacific Mining Stocks more particularly to notice in the East, for investment and information of the mass of the people, outside of the leading capitalists of New York and Eastern cities. Such companies as are prominent before the public, and those whose prospects are deemed worthy, will be embraced in the 1st Volume. A 2nd Volume will be issued to include all new companies formed subsequent to the compilation of the 1st. An opportunity will be offered to advertisers, for a few outside pages in the work. MR. LEIGH HARNETT is Advertising Agent, and MR. J. A. WOODSON, San Francisco Corresponding Agent, of whom further information can be had.

All Companies upon whom the Agents have not called, will please address us as above, and answer, as full as may be, the following questions :—

1. Name of Company.
2. When discovered.
3. Where located.
4. When incorporated, and where.
5. Extent of Claim.
6. Capital Stock.
7. No. of Shares.
8. Assay per ton : Gold, Silver, and Copper.
9. President and Secretary, Board of Trust's.
10. Location of Office.
11. Such additional information as may not be answers to the foregoing interrogatories.

Note.—Specimens of Ore requested, labeled, for reference in Cabinet of New York Office.

W. A. ANDREWS & Co.,  
Pacific Mining Stock Agents, New York.

SPECIAL NOTICE.

We wish it distinctly understood that all the interest which Julius Silversmith ever had in the MINING AND SCIENTIFIC PRESS, ceased in November of 1862. EWER & SMITH are now the publishers and proprietors.



**DESKS**

AND

**Office Furniture,****OF ALL KINDS.....FOR SALE BY****JOHN WIGMORE,****No. 423 CALIFORNIA ST., SAN FRANCISCO.**

OFFICE JOBBER, of all kinds, attended to.

**PALMER, HANSCOM & CO.,****GOLDEN STATE IRON WORKS,****No. 19, First Street, San Francisco,****Finish Castings and Machinery of all kinds**

ALSO:

**GENUINE WHITE IRON SHOES AND DIES.****PALMER, HANSCOMB & CO.****To Quartz Miners.****Knox's Improved****AMALGAMATING PAN,****WITH****PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

It is introduced in the most effective and economical manner, while it is peculiarly adapted to the floating gold and silver, known to be otherwise lost. Made exclusively by

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
**Nos. 19 & 21 First Street, San Francisco**The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and cautioned against making, buying, using or selling the same without his consent.  
**W. A. PALMER.****T. C. Sanborn & Co.****STOCK BROKERS,****No. 630, MONTGOMERY STREET.****PHIL SILVER MINING STOCK,****GOULD & CURRY MINING STOCK,****CHOLLAR MINING STOCK,****CALIFORNIA STEAM NAVIGATION CO'S STOCK,****BOUGHT & SOLD.****DEETKEN'S****Chemical and Metallurgical Works,****On San Bruno Road, Islais Creek,**  
**SAN FRANCISCO.**OLD BEARING SULPHURETS WORKED AT REASONABLE RATES. ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 20 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by owners. No power nor clean water required for purpose.  
nov8-3m**LEWIS COFFEY AND RISDON,****STEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing Old Work, executed as ordered, and warranted as equality.

**Stand, corner Bush and Market Streets.**  
**Opposite Oriental Hotel, San Francisco, Cal.**  
**LEWIS COFFEY. J. N. RISDON.****THEODOR KALLENBERG****Maker of Models****FOR INVENTORS.**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Maps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.  
**No. 4 Sansome street, corner Market,**  
**San Francisco.****International Hotel,****JACKSON STREET, ----- SAN FRANCISCO****[A few doors above Montgomery.]****FIRE-PROOF BRICK BUILDING.**Most convenient to the  
Steamer's Landing, Business etc. & Places of Amusement**OPEN ALL NIGHT.****City Railroad Cars Pass the Door.****REDUCTION IN PRICES.**Five Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**

and sets as good a table as any House in the City. I am determined that the International shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

**F. E. WEYGANT, PROPRIETOR.****Tremont House,****418 and 430 ----- Jackson Street,****[A few doors from Montgomery.] SAN FRANCISCO, CAL.**

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

**The City Railroad Cars pass the Door.**

The House is conducted on Temperance Principles,

**WHICH SECURES TO OUR GUESTS QUIET.**The prices for board and Rooms are very moderate--by the day, meal or week. WE SOLICIT A CALL FROM ALL.  
**F. E. WEYGANT, Proprietor.**

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

**F. E. WEYGANT.****Volcanic Smelting Furnace.**

PERSONS DESIRING INFORMATION AS TO THE USE and economical properties of this Furnace, and intending to make use of the same, when satisfied of its superiority over all other means of reducing ores and separating metals from the sulphurets, can obtain all needed explanation and advice in regard to the same, and the terms of sale of rights to use the same, on application Col J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietress through the Post Office of San Francisco. Drawings may be seen at the office of Col. J. D. Stevenson, No. 614 Merchant street, or at the office of T. Ogg Shaw, in Brannan's Building, Montgomery street.

The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace which will save all these portions of precious metals which usually escape in a volatile form. The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of a capacity for smelting one ton of ore or more, on signing an obligation to pay the usual fee for the right to use it, should they continue to make use of the invention or a longer period than two months.  
mch 16 MRS. E. J. HALL, M.D., Proprietress.**LEANDER RANSOM,****Civil Engineer**

AND

**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL LANDS,****At the low price of \$1.25 per Acre.**

Terms--Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N.E. corner of Montgomery and California streets. oct-3m

**The Occidental Hotel**

IS NOW

**Open for the Reception of Guests.**

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**

AND A LARGE

**CABINET FOR MINERALS;**

ALSO

**A Branch Telegraph Office,**

Connecting with all the lines throughout the country.

**LEWIS LELAND & CO.,**

Proprietors.

**San Francisco, Jan. 1st, 1893.****John R. Sims,**

Oregon street, between Washington and Davis and from and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and Shutters, Bank Vaults, Grating, Cemetery Railings.** All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.**Mr. Sims Appreciates the Past** liberal patronage of his friends, and trusts that he may continue to merit it in the future.**For the Information of Strangers** he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attest. A large assortment of second hand shutters for sale at low rates. ap13**NATHANIEL GRAY,****General Furnishing Undertaker,****641 Sacramento st., Cor. of Webb,****SAN FRANCISCO.****FULTON FOUNDRY & IRON WORKS****HINCKLEY & CO.,**

MANUFACTURERS OF

**Steam Engines,****QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,****FIRST STREET,****BETWEEN MARKET AND MISSION.....SAN FRANCISCO.**\*\* All kinds of IRON and BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing or Machinery neatly done. PATTERNS MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.**W. T. & J. GARRATT,****City Brass and Bell Founders****Cor. First & Market sts., San Francisco.****BABBET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gange cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS OF ALL SIZES. Manufacturers of "Garrett's Patent Improved Journal Metal."****SQUARZA'S PUNCH.****FIRST PREMIUM****AT THE SACRAMENTO AGRICULTURAL STATE FAIR****FOR 1892.****ALSO; FIRST PREMIUM****At the San Francisco Bay District Agricultural Fair, 1892****MANUFACTORY, WHOLESALE AND RETAIL,****No. 44 Leidsdorff street,****Opposite the What Cheer House, San Francisco.****To Mine Owners.****PARTIES having a Good silver Mine** and wishing for**Machinery to work it for an interest in the Mine** will do well to apply at this office. No organized company need apply.**50 lbs. MARINE and****Fire-Proof Paint,****MANUFACTURED BY THE PACIFIC METALLURGICAL** Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever infect it, and cheaper than any other paint.**DIRECTIONS:**For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE:--Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:--Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,**G. T. FOUQUE, Superintendent.****WORKS, North Beach; Office, 318 California st., San Francisco.****WRIGHT'S PICKS.****JOHN WRIGHT**, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.--None genuine unless stamped with my name.  
**JOHN WRIGHT, 511 Market street,**  
**Opposite Battery, San Francisco.****REMOVAL.****OFFICE OF THE PACIFIC METAL**urgical Office is removed to 318 California street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 16 tons of Silver or Gold rock per day.Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
**COPPER ORES**--Highest market rates advanced in cash, for shipments.  
S. C. BRADSHAW, Agent,  
318 California street, near Sansome.**WANTED,****GOLD QUARTZ SUITABLE FOR****CUTTING JEWELRY,**By **FRONTIER A. DEVIERCY,**

13 ap

487 Pine street, San Francisco.

**FREDERICK MANSELL,****MECHANICAL & ARCHITECTURAL****DRAFTSMAN;****No. 422 California street, corner of Leidsdorff.**Drawings of Models made for parties applying for patents at Washington or London.  
mar23 2m**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

**CROCKERY,****GLASS WARE,****FRENCH CHINA,****Coal Oil Lamps, Table Cutlery,****CLOCKS,****Silver Plated and Britannia Ware,****ETC., ETC., ETC.****NO. 516 SANSOME STREET,****[CORNER OF MERCHANT.]****SAN FRANCISCO.**



P. DONAHUE. H. J. BOOTH. C. S. HIGGINS.

**UNION  
IRON AND BRASS FOUNDRY.**

(The First Established in the State.)

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

**HAVING ADDED TO THE SEVERAL** Departments all the recently improved Tools, this Establishment is now the most Extensive and Complete of any on the Pacific Coast.

The undersigned are prepared to furnish, at short notice, Locomotive, Marine and Stationary Engines, of every size and description.

**BOILERS.**

Locomotive, Flue, Tubular, Upright and Cylinder, furnished with or without engines, complete.

Machinery and Castings of every description, Saw-mills, Grist Mills, Car Wheels, Derrick Irons, etc.

**QUARTZ CRUSHING BATTERIES,**  
Embracing a great variety of Stamp, Mortar and Cam Patterns.

**AMALGAMATING MACHINERY,**  
Varney's Improved Patent Pans and Settlers, Wakely Pans, Amalgamating Tubs, Plaisted's Grinders, Chile Mills, Concentrators, etc., etc.

**MINING PUMPS.**

Cornish, Lift and Force Pumps, from four to eight feet stroke, with Pipes, Bob Mountings, and Gearing complete.

**HOISTING DRUMS.**

For Shafts or Inclines, with clutch, friction or V cones. Sole Agents and Manufacturers for the Pacific Coast, of C. and G. M. Woodward's Celebrated Patent Safety Steam Pumps and Fire Engines.

All Contracts and Orders executed with promptness and dispatch, and at reduced prices for Cash.

je21 DONAHUE, BOOTH, &amp; CO.

I. C. E. KLEPZIG &amp; CO.,

**GUN MAKERS,**

...AND...

DEALERS IN GUN MATERIALS,

733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Ekland. je21

**CORNELL'S****ECELSIOR GALLERY,**

650 Washington st. Three doors below  
Kearny.

Having refitted the above rooms the undersigned is now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

**CARD PICTURES.**

As I have every facility for producing these beautiful pictures, in all their different varieties, I have reduced the price to

**\$3 PER DOZEN AND \$2 PER HALF DOZEN!**

Large size Photographs. \$3—Extra copies \$1 each.

AMBRONTYPES in all Styles and Prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist.

je22 R. H. CORNELL.

**Giffards Injectors,**

**FOR SUPPLYING BOILERS WITH FEED WATER** without Pumps No Mill or Mining Company should be without one of these valuable Instruments. Send for a Circular.

je22 Cor. Pine and Front Sts., San Francisco.

DAVID STODDART, Agent.

**BAUNCHEIDTISM,**

THE PRESERVER AND PRODUCER OF LIFE.

**THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF** curing disease, is a "fait accompli" in medicine, and needs no more proof. The public has crowned Bauncheidism already with an extraordinary patronage, and it is acknowledged by all men of science that BAUNCHEIDTISM is founded on a rational, scientific basis.

It can safely, and with sure success be applied to paralysis in consequence of Apoplexy, Podagra and Rheumatism of every description, which kind of complaints can find their only relief by the above method.

Especially can it be applied successfully, in the spring of the year to diseases of the eye.

Dr. Borchers in San Francisco, and Dr. C. J. Marx in Sacramento, are the only doctors in California who have the original series of Dr. BAUNCHEIDT and his original oil. Dr. Borchers is also in possession of original letters of the inventor of the method by which he can prove that he is the best master of the latter.

Dr. J. C. BORCHERS,  
No. 19 Kearney street, and No. 4, Mark's Place, First story, No. 5. Office hours from 9 to 11 A. M., and 1 to 4, and 7 to 9 T. M. je21

**The Pacific Mineral Company**

**MAKE LIBERAL ADVANCES UPON THE ORES OF**  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-tf Montgomery Street, San Francisco.

**MARTIN & Co.,**

OFFICE--224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

**Purchase of Copper Ores,**

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York. San Francisco.

San Francisco Post Office, Box 1259.  
je 1.

**REYNOLDS'**

**Patent Cut-Off and Governor,**  
FOR STEAM ENGINES.

127 of these Invaluable Machines,

ARE NOW IN USE

In California and Nevada Territory, giving a perfectly regular motion and

Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor**

Is the CHEAPEST, SIMPLEST and QUICKEST to set and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

**Clark's Steam and Fire Regulator,**

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

**Ingersolls Patent Drill Press,**

With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

**Felt for Steam Boilers, Pipes, Etc.**

At the lowest market rates.

**Steam Engines, Boilers, Pipes,**

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

**Anti Incrustation Powder,**

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years.

Refer to—Sugar Refinery, San Francisco,  
Cottell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.

E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

**Office of the Nevada Copper Mining Co.**

March 24, 1883. At a special meeting of the Board of Trustees, held this day, an assessment of Forty Cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees,  
J. ARMSTRONG, Secretary.

**J. F. & H. H. SCHAFER**

Manufacturers of and Dealers in

**BEDDING AND FURNITURE,**

of every description,

Blankets, Comforters, Sheets, Etc., Etc.

Nos. 504 and 506 Sansome Street,  
(Near Clay.) San Francisco.

This Establishment is now generally known to be the Cheapest Place in the City for good Bedding.

Branch Store.....Broad St., Nevada.

**A. C. MORSE,**

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS** with MINER S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco. I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

**MYERS & DAGGETT'S**

Mining and Stock Exchange,

No. 23 1/2 B Street, Virginia City, N. T.

Mining Stocks of All Kinds Bought &amp; Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to

\* \* \* Abstracts of Titles Furnished, Etc.

**P. M. STEAMSHIP COMPANY.****NOTICE.**

**Until further notice, the Steamers of** Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above date is fall on Sunday, the steamship will be dispatched on the following Monday.

A. B. FORBES, Agent.

**Wm. P. TAAPFEE,**

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

**A. ROMAN & Co.,**

WHOLESALE AND RETAIL

**Book Establishment,**

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to.  
A Treatise on Metallurgy, comprising Mining and General and Particular Metallurgical Operations, Etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Piggot on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying, by Phillips. Miners' Companion and Guide, compiled by Silvermith. Assayers' Guide, or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Silver Ores and Silver Mines, by Pro. Blake. Ore's Dictionary of Arts, Manufactures and Mines. Weisbach's Mechanics of Machinery and Engineering. Nevill's Hydraulic Formula Tables.

Frederick's Chemical Analysis.  
**Together with many other works in this and similar lines**

Books imported to order on short notice. A. ROMAN & Co.  
417 & 419 Montgomery Street.

**WHEELER'S**

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated on the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans can be seen in daily operation at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

no16-tf

ZENAS WHEELER.

**To Mining Companies.**

**FOR SALE—A STEAM ENGINE AND BOILER.** THE Engine is 30 horse power—10 inch cylinder—24 inch stroke—solid iron frame, with heater, pumps, etc., all complete. The boiler has 5 flues, is 24 feet long, 40 inches in diameter, made up from the best three-eighths inch Low Moor Iron, and weighs about 5000 pounds.

Both Engine and Boiler are in perfect order and fully guaranteed. Apply to

I. H. HAM, No. 211 Clay st.  
San Francisco, June 13, 1883. 3t

**New Patent Agency.**

**WE HAVE CONNECTED WITH THE** Publication of the "MINING AND SCIENTIFIC PRESS"

**The Patent Agency Business,**

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to apply upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency**

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco. EWER & SMITH.

**FOREIGN PATENTS OBTAINED**

By application at this office, Room 27, Federal Building. EWER & SMITH, Solicitors.

**NOTICE TO INVENTORS.**

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate. EWER & SMITH.

**PATENT RIGHTS.**

**Patent Rights Bought and Sold,**  
At the office of the "Mining and Scientific Press" Agency EWER & SMITH.

**P. M. S. CO.**

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the month of May, 1883.

June 13th, - - - Steamer Constitution

June 23d, - - - - - Steamer Orizaba

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.  
je4 Corner of Sacramento and Leidesdorff sts.

**Miners' Foundry**

—AND—

**MACHINE WORKS,**

First St., between Howard &amp; Folsom,

SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS MACHINERY,** the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* \* \* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING  
San Francisco, February 23, 1883.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, JUNE 29, 1863

NO. 35.

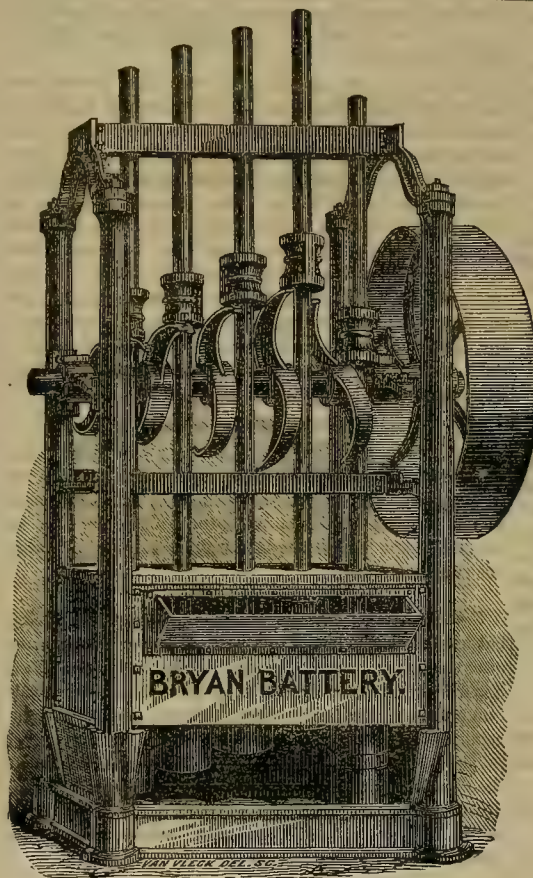
## THE PLATTNER PROCESS.

Mr. Editor:—I find there is much misapprehension here as to the "Plattner Process" for extracting gold from sulphurets, and the extent to which it has been used. Mr. Hittell even stated in 1861 that it had not been "used on a large scale." The fact is that it is so valuable that it enabled the Reichenstein mine, in Silesia, which had been closed for centuries to be reopened and worked. In 1851 a Council medal was awarded to Herr Plattner and Gueltnner for its successful application there. The ore is pyrites, containing arsenic and about 200 grains of gold to the ton. It is roasted and the arsenic volatilized and condensed—the burnt pyrites, chiefly oxide of iron, is placed in a vessel, where it is subjected to the action of chlorine. This renders the gold soluble in water, and the gold is afterwards precipitated from the solution, and then reduced to ingots. Professor Muscott very justly observes on this, that it is equally applicable to the vast quantity of refuse accumulated at other old works. Yours, &c.,  
San. Fran., June 27. A POOR CHEMIST.

## CAST CHANGED TO RAR IRON.

Sterling's process for the conversion of cast iron into iron is deserving of consideration:—  
To a given weight of cast iron, about 1-20 to 1-5 much scrap iron is added, most conveniently by putting the scrap-iron into the hollows which it is desired to fill by cast iron run directly from a blast furnace. The pigs are puddled as usual, taking care at the whole be thoroughly melted. The stream of cast iron may also be run upon the hearth of a reverberatory containing scrap iron, heated to a point below welding; the heat is raised until both are incorporated, and the metal is then run into a puddling furnace. With better qualities of cast iron, from 1-10 to 1-3 of scrap iron may be used. In order to obtain malleable iron, harder, less fibrous, and more granular than usual,  $\frac{1}{2}$  or 1 per cent. of tin is added to the malleable iron mixtures above described. Bismuth,imony and arsenic will produce a similar effect. Each hard iron is said to work well while hot, under a hammer, in the squeezer, between the rolls, and in smithy. Zinc may be used in the form of a calamine, about the same quantity of copper also gives additional hardness of iron. Black oxide of manganese in the proportion of  $\frac{1}{2}$  to 1 per cent. of the mixed malleable iron, gives a steely character to it, hardening the iron and facilitating the puddling process.

**ARTIFICIAL GEMS.**—To make gems, Elbemen avails himself of the two properties of boracic acid, of dissolving metallic oxide by fusion, and volatilizing at a higher heat. His process resembles the solution of substances in water and the evaporation of that water to obtain crystals. Having made a mixture of alumina and magnesia, in the proportions as they exist in spinelle, and added 1 per cent. of bichromate of potash, he added two pts. of this mixture to 1 pt. of fused boracic acid and exposed it to platinum resting on porcelain to the heat of the porcelain furnace of Sevres. The product contained cavities lined with minute rose-red, octahedral crystals, harder than quartz and infusible before the blow pipe.—They had all the characters of the ruby. The constituents of emerald, treated in the same way, yielded small hexagonal crystals, harder than quartz, and therefore agreeing with true emerald.



THE BRYAN BATTERY.

The accompanying cut represents the "Bryan Battery," manufactured by Goddard & Co., at the Pacific Foundry in this city. This Battery is now extensively employed in every section of the State, the adjoining Territories and Mexico, and possesses many advantages over most of those in use. One very important advantage attendant upon this Battery is the small expense of its erection and the facility with which it may be moved from place to place when found desirable. Being constructed almost entirely of iron, it is not effected by the alternations of heat and moisture, which produce such a damaging effect upon all structures of wood, in the interior portions of the Western Slope. The mill is also adapted to dry as well as wet crushing. Each Battery is complete in itself and others may be added from time to time, as occasion may require, without making any important changes in the arrangement of the mill, or machinery. The Batteries after being constructed are always put up at the Foundry and perfectly fitted, before being sent off. Perhaps one of the best recommendations, which can be offered

in behalf of this Battery is the fact of its introduction into so large a number of mills as are enumerated in Goddard & Co's Circular. See advertisement of this Mill on our last page.

A BOARD OF BROKERS INCORPORATED.—The San Francisco Board of Brokers on Friday filed its certificate of incorporation. Capital stock \$125,000 in 125 shares of \$1,000 each. Trustees.—Samuel Purdy, G. M. Blake, J. Shaffer, A. J. Tobias and J. D. Stevenson.

A CLOCK FOR THREE PENCE. An ingenious time taker has been invented by a citizen of Manchester. It is a small card, on the face of which hangs a weighted string. The card is so figured, that by holding in the sunshine, a bead on the string will indicate the solar time. By it the hours of sunrise and sunset may be also ascertained. It is, undoubtedly, the cheapest time-piece that ever was devised.

## GREAT BASIN MINING COMPANY.

The above named association is now fully organized and prepared for active operation. The Company holds 55,000 feet, chiefly in Humboldt County, Nevada Territory:—Among others, on the following ledges:—Clyde ledge, Occidental series, Neptune series, Auld Lang Syne ledge and Frost ledge. Besides which the Company owns several town sites, large quantities of wood land, etc., etc.

The Capital Stock is \$5,000,000. The names of the parties interested are as follows:—President—George C. Johnson. Treasurer—George W. Gibbs. Trustees—George C. Johnson, Messrs Billings, Teschemacher, McAllister and Jessup.

Secretary—J. H. Blood. Members—W. J. Tilley, (Sneath & Co.), Thomas Bell, (Barron & Co.), W. C. Little (at Parrott & Co's), A. P. Stanford (Stanford Brothers), R. M. Jessup (C. S. Navigation Co.), John Wedderspoon (Cross & Company), Solomon Hydenfeldt, Robert Turner, (Turner Brothers), Hall McAllister, J. C. Lund (at Cross & Co's), Charles Pace, George C. Johnson, John H. Saunders, Dr. C. C. Knowles, Henry F. Teschemacher, G. W. Gibb, Frederick Billings, Henry M. Hale, James Kellogg, H. M. Whitmore, O. E. Johnson, P. N. McKay, Jonathan Williams and E. R. Highton.

## COPPER UPON THE EASTERN SLOPE.

Mr. Alexander Hertlein, has left with us some fine specimens of copper ore taken from a ledge recently opened in the Sullivan District, East of Carson River, and six miles distant from Winter's Mill. The ore consists mainly of Blue Carbonate and assays for copper alone, 24 per cent. Quite a number of assays have been made from this vein, for gold and silver, the average result of which, in addition to the copper, is about \$20 in gold, and \$18 in silver. The Company consists of three persons, beside Mr. H., and they hold 1200 feet. It is known as the Red Fox Ledge. This, we believe is the farthest point northward at which copper has been discovered on the Eastern Slope. From this region, southward, into Mexico, copper is found at almost all points. Our friends on the Eastern Slope are beginning to turn a large share of their attention to copper, not neglecting, the while, either gold or silver.



NOTES OF A TRIP TO SLATE RANGE *via* LOS ANGELES AND EL PASO.—No. 3.

## EL PASO.

APRIL 22nd. Two of our party having concluded to remain here, we took off our freight and pitched our camp in Mesquit (don't know about the spelling of this word—pronounced Mayskeet) Cañon, where a patch of that beautiful bush grows about 8 feet high, covering a space of about 20 feet square.

This is the only growth of the kind in the neighborhood, and, with the springs near by, will probably form the nucleus of a great city, *poco tempo*. One of our party having contracted at Los Angeles, to drive one team through to Slate Range, passed on with the train, in the afternoon, with instructions to stop there and report, if good, or return.

## IN CAMP.

The first thing to do, after pitching tent, was to get supper. We have to go out on the plain, nearly half a mile, where we find plenty of grease-wood, which grows in bushes twenty to forty feet apart, twenty-five to one hundred stems rising from one root, some as large as the thumb and many as small as pipe stems, and from four to eight feet high branching in every direction, so that one can only with difficulty, approach near enough to cut the stem at the base. This is very laborious, and generally results in bleeding hands and wrists, unless protected by strong gauntlets. With a rope, we tie up as much as we can carry and pack to camp.

## AN UNPLEASANT NEIGHBOR.

While working into my first bush, I found a nice little rattlesnake coiled up within four inches of my bare hand. I soon dispatched him and found he had only a button on his tail, showing that he was not yet eighteen months old. This greasewood makes the hottest fire of any wood I ever burned, for in five minutes after applying the match, I found the heat strong enough to melt away all the soldered parts of a coffee-pot. *Mem.* An iron coffee pot, well riveted, is the only style to be used here.

## AFTER SUPPER.

In twenty minutes supper was disposed of, and it being very dark, we concluded to visit a neighboring tent, fifty feet distant, and the only one up when we were around. There we found the entire population of the District assembled under a canvas about twenty feet square, also the population of our ox-train, with Mr. McCaffey, as chorister, all actively engaged in singing the popular songs of the day, and all determined to have a jolly time so long as Mac could be with them, as he leaves on his horse in the morning, to overtake his train, now on its way to Slate Range.

## TAKING THE CENSUS.

I improved the opportunity here presented to take a census of the District as a reference, hereafter, to know who might be entitled to a diploma as pioneers. I registered the following names:—

Theophilus Cobb, *via* Virginia, Kentucky, Visalia and Slate Range, here.

Griffin H. Williams, New York, Los Angeles, San Bernardino, Slate Range.

David M. Porter, *via* Los Angeles, here.

David Teass, Missouri, Los Angeles, Slate Range.

Peter A. Turner, Virginia, Texas, Visalia, Slate Range.

Albert F. Meyers, Texas, Visalia, Slate Range.

John C. Steger, Missouri, Volcano, Slate Range.

John D. Yarborough, Mississippi, Soledad, Slate Range.

Geo. W. Yarborough, " " " "

A. J. McGaffey, Los Angeles, Forwarder.

Four of the above were absent on a trip to Slate Range, for their tent, tools and grub. But as they came in the next day, and had been here before, they are entitled to be classed among the Pioneers, as well as our own party. These now form the nucleus of the future rich and populous District of El Paso. So we retired, "by the light of the moon," nearly all, to our blankets in the sand.

## A VIEW OF THE COUNTRY.

! APRIL 23d. Up before the sun to look around us to see what kind of a land we are in. From a barren hill of something like ashes, near by, we take an observation. As we look south-west, over the road we came, we notice a great

barren plain, as far as the vision extends, with a chain of mountains bounding it on the right, and another opposite us and about 15 miles distant, running 15 to 20 miles south-westerly, making the plain below us an arm of the Great Desert, about 20 miles long, to the range north-easterly, over which the road leads to Slate Range, through the El Paso.

About three miles back commences a small alkaline lake, some eight miles long by three to five broad, resembling a sheet of ice. Not a bush or tree is in sight larger than the musquit by our camp. All is barren, the mountains generally appearing like cones of ashes, sharp and precipitous. Not a drop of water is any where to be found, except at six points within forty-five miles, viz:—Laurel Hill, Mesquit Springs, Mountain Cañon, Desert Springs, 12 miles, and Sink of the Tehachepe, 40 miles, and Can or Grape Vine Springs, 9 miles south-west.

Nothing can exceed the barren and desolate condition of this country, while the thermometer ranges from 102° in the cooler places, to 122° in our tent, when closed, from 10 o'clock to 3 P. M.

## THE MINES.

We amuse ourselves to-day, in examining specimens in camp from the various leads:—Tucker, Eureka, Comet Mammoth, Boston, Ben Lohmon, Gov. Downey, Laurel Hill Manzanillo and Almadan. All look good—some very rich. We shall visit them.

24th. Put on my wooden soled shoes and started out early to prospect and examine the lodes already taken up. We find that half a dozen men have been very busy here most of the time since last November and have lodes taken up in all directions, particularly in the vicinity of Copper Mountain and Copper Basin. They abound in Lodes in which copper seems to predominate, though the universal opinion prevails that they will run to silver. Perhaps they will, but very little is actually known of the real value of the rock and much labor is to be expended before anything like a certainty can be arrived at. Two or three feet seems to be as low down as any one has yet sunk on their lodes, and none seem to be in haste to work down while there is a good chance to prospect.

## DISTRICT MINING LAWS.

The laws here are very liberal, giving a year to prospectors to do any work, if a record is made within 30 days after location! For the good of the country and new comers, we must try to have this law changed to a shorter time, so as to abridge prospecting and making a show of work done on the ground.

**FIRE CLAY FROM FUSIBLE CLAY.**—A good quality of clay, but not fire clay, is mixed to a paste with muriatic acid, and after some time heated to boiling.—The acid is run off the clay fully washed and dried. Clay thus treated was made into crucibles, in which bar iron was fused, without their becoming softened by heat. The acid simply extracts a large proportion of the bases (lime, iron, &c) which tend to flux the principle part of clay, the silica and alumina; but the question of economy will influence the use of this remedy for the fusibility of clay, and it is doubtful whether the process will be adopted by manufacturers.

**HYDRAULIC CEMENT.**—When finely powdered marble, limestone, or chalk, is mixed to a paste with milk of lime, it hardens rapidly like hydraulic lime, has a feeble alkaline reaction, and resists water tolerably well. The mass is plastic and may be used to take large or small impressions.

The analysis of a genuine Roman mortar from Pompeii, leads to the inference that the Romans prepared their mortar from a mixture of caustic and carbonate of lime, with the addition of pulverized calcareous spar.

**NEW MOTOR.**—M. Boutet, a French engineer, residing in Brussels, has invented a machine which it is said is likely to do away with the employment of steam as a motive power!

The machine is worked by hydraulic pressure, the principle being applicable alike to locomotives and stationary engines. Experiments just made with it at Brussels have been attended with complete success.

**THE AURORA QUARTZ MILL.** on Bodie creek, Aurora, Mono county recently took out from one weeks run, as much amalgam as four men could carry!

## GEOLOGY AND GOLD IN ASIA MINOR.

A distinguished English Civil Engineer, C. E. Browning Esq., recently delivered a very interesting lecture before the Smyrna Literary and Scientific Institution, on the "Geology and Gold in Asia Minor," from which the following extract is taken:

"To the geologist this country offers a field of observation that will well repay the time expended upon it. To account for the gradual rising of the land on a tideless coast, and to speculate on the effect that future elevation will produce on the country, are points full of the greatest interest, not only to the man of science, but it is a most important question to the Govt and the inhabitants of the country. The river beds are rising so rapidly, that if human agency does not counteract the influence of Nature (and it is not probable that the Turks will do anything, as they prefer to let Nature take her course,) the greater part of the plains in the interior will become waste marshes, hot beds of malaria, fevers and plague. For instance, let us turn to the natural drainage of the western part of Asia Minor, or what I will call the Smyrna Watershed, which is at least 10,000 square miles in extent and is drained by only two rivers, the Hermus and the Caister, neither of which is navigable, and both of which have within the historic period become so raised, that the mouth of the former is about 15 miles nearer the sea, leaving a passage now of less than half a mile to the opposite shore; at the Cayster has advanced at least another ten miles. On the southwest coast this encroachment is still more visible."

I leave you, therefore, to imagine what will become of the vast amount of rain that will fall upon these 10,000 square miles in time to come, when the rivers are still more raised and consequently less able to carry off the water. Let us examine the rocks that exist—it is an almost unexplored district. Smyrna has added scarcely a fossil to the cabinet of Europe; and in what museum is its metallic wealth displayed. Here are mines of silver, lead, antimony, copper and iron, almost unrivalled for their richness; and I have ventured an opinion that the day is not far distant when the gold diggings of Asia Minor will attract thousands to Smyrna. Lignite coal exists in incalculable quantity, and though it has been proved unfit for the manufacture of gas, its proximity to a rich iron district will render it a most valuable addition to the resources of the empire. An abundant supply of the finest kaolin provides what is necessary for the manufacture of the costliest pottery; while from the commoner sorts of clay the home requirements of the lower branches of the ceramic art can be supplied. The geological student, in his rambles in this country, meets with rocks of all classes, from the most recent alluvium to the oldest of the primary rocks—from the volcanic cone, forced to the surface by internal fire, to the stalactite deposited by drops of water.

The Calaveras Chronicle says that within five years there will be 10,000 inhabitants in Copperopolis and vicinity.

**WANTED.**—A full set of Patent Office Reports (Mechanical) Inquire at this Office.

## Our Mint, its Rules, Charges and Operations.

*For parting silver from gold when gold*

is below 300-1000ths. fine ..... 3cts per oz.  
" from 30-100ths. to 750-1000ths fine. 7 cts "  
" " 750-1000ths to 950-1000ths " 14 cts "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce ½ per ct. on gross value of all silver contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce, ½ per ct. on value of silver for making bars; also when gold is contained ½ per ct. on gross value of gold for coining. Refining charges in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz. ½ per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. cents per standard oz. ½ per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz. ½ per ct. on gross value of deposit for making bars.



## DIVIDEND PAYING MINES

Name of Company	Locality of Mine	Secretary.	Locality of Office
SPRING CREEK CO.	Virginia District.	Thos J. Lamb.	Rm. 1, Express bldg.
CHERRY GAS CO.	Virginia District.	Wadsworth...	Laura A. Turner bldg.
HERMAN CO.	Gold Hill, N. Ter.	E. T. Hopkins.	406 Front street.
JANNEY CO.	Devil's Gate District.	A. de Senillac	Government House.

## PROGRESSIVE MINES.

AMERICAN G & S	Virginia District	Joshab Clement	620 Washington st
AMERICAN G & S	State Range Dist.	W. H. Clarke	224 Montgomery st
AMERICAN UNION	Esmeralda District	E. Buckingham	307 City street
AMERICAN FLOCKER	La Paz, New Mex.	W. B. Blako	224 Montgomery st
AMERICAN G & S	State District, Humb.	W. H. Martin	617 City street
ALBANY, EARTY & S	State Range	W. H. Clarke	224 Montgomery st
ALBANY G & S	State Range	W. H. Clarke	224 Montgomery st
ALBANY COAL CO. G & S	Alameda County	L. Fraucourt	Lucas Turners bgs
ALBANY S M CO	Lower cal. Mexico	J. Landsburger	611 Montgomery st
ALBANY S M CO	State Range	J. Landsburger	611 Montgomery st
ALBANY S M CO	Devil's Gate Dist.	J. F. Popo	115 California st.
ALBANY S M CO	Esmeralda District	S. Patten	622 Montgom'y st
ALBANY S M CO	Esmeralda District	Wm Winchester	Aurora, Mono Co.
ALBANY S M CO	Humboldt's Gate Dist.	J. O. Strauch	815 Sansome st.
ALBANY S M CO	Humboldt District	J. H. Gager	Mercht st, mnt blk
ALBANY S M CO	Flowerly District	S. R. Rooney	7 & 8 Gov't House
ALBANY S M CO	State Range Dist.	A. H. Clark	622 Montgomery st
ALBANY S M CO	Esmeralda District	A. L. Chamberlin	305 Montgomery st
ALBANY S M CO	Humboldt District	A. L. Chamberlin	305 Montgomery st
ALBANY S M CO	Esmeralda District	E. Daniels	Cashier Custom
ALBANY S M CO	Esmeralda District	Wm V. Garvey	622 Moreburt st
ALBANY S M CO	Deho district N. T.	Geo. E. Philau	726 Montgomery st
ALBANY S M CO	Esmeralda District	J. H. Templeton	550 City street
ALBANY S M CO	State District, Humb.	E. H. Martin	817 Clay street
ALBANY S M CO	State Range Dist.	E. H. Martin	817 Clay street
ALBANY S M CO	State Range Dist.	J. T. Jones	606 Montgomery st
ALBANY S M CO	Am'cn dis. Humb.	J. S. Luty	305 Montgomery st
ALBANY S M CO	Esmeralda District	John W. Gould	406 Montgomery st
ALBANY S M CO	Boie (Esmeralda)	A. L. Chamberlin	413 Montgom'y st
ALBANY S M CO	Star Dist, Humb'l	W. P. Deucka	413 Montgom'y st
ALBANY S M CO	Gold Hill District	P. B. Coruwall	908 Merchant st
ALBANY S M CO	Esmeralda District	R. N. Van Brunt	706 Montgomery st
ALBANY S M CO	Virginia District	E. C. Lovell	436 Jackson street
ALBANY S M CO	Virginia District	S. S. Spivey	436 Jackson street
ALBANY S M CO	Virginia District	C. D. Douch	Lucas Turners bgs
ALBANY S M CO	Silver City	F. S. Carter	415 Sansome st.
ALBANY S M CO	Russ District	David Wilder	622 Montgom'y st
ALBANY S M CO	Van Horn County	T. L. Bibbins	305 Montgom'y st
ALBANY S M CO	Two Tunnas County	John W. Gould	406 Montgomery st
ALBANY S M CO	Esmeralda District	J. Woodthorpe	326 City street
ALBANY S M CO	Whoe & Egladista	W. Hersfield	642 Clay street
ALBANY S M CO	State Range Dist.	W. B. Lawton	400 Montgom'y st
ALBANY S M CO	La Paz, Mexico	W. B. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	R. E. Raimond	516 Front street
ALBANY S M CO	Humboldt District	N. B. Melville	606 Montgom'y st
ALBANY S M CO	Gold Hill District	W. B. Agard	412 Front street
ALBANY S M CO	Virginia District	Henry Toomey	cor Mont & Cal. st.
ALBANY S M CO	Esmeralda District	Wm L. Daucan	Pioneer Building
ALBANY S M CO	P. R. dis. Humb'l	M. G. Elmore	623 Montgom'y st
ALBANY S M CO	Coso District	E. W. Chambers	11 Court Block
ALBANY S M CO	Virginia District	A. A. Armstrong	622 Montgomery st
ALBANY S M CO	Virginia District	W. E. Wood	123 California st.
ALBANY S M CO	State Range	G. J. Turner	606 Montgom'y st
ALBANY S M CO	Humboldt District	V. B. Post	Lucas & Turner bgs
ALBANY S M CO	Mariposa county	John W. Gould	406 Montgom'y st
ALBANY S M CO	Esmeralda District	Thos Brownjohn	621 Clay street
ALBANY S M CO	Van Horn District	J. S. Luty	305 Montgom'y st
ALBANY S M CO	Esmeralda District	J. H. Purkitt	Custom House
ALBANY S M CO	Solo District, Los An	D. W. York	606 Sacramento st
ALBANY S M CO	Virginia Dist.	G. B. McCahey	712 Montgomery st
ALBANY S M CO	Virginia District	C. L. Farrington	509 Sacramento st
ALBANY S M CO	Virginia District	W. F. Dean	53 Mont'ry Block
ALBANY S M CO	Silver City	W. E. Dean	53 Mont'ry Block
ALBANY S M CO	Gold Hill District	J. H. Jones	321 Front street
ALBANY S M CO	Devil's Gate Dist.	Gomer Evans	338 Mont'ry st
ALBANY S M CO	Esmeralda District	John Woodthorpe	326 Clay street
ALBANY S M CO	Silver Mt. mono.	A. H. Clark	622 Montgom'y st
ALBANY S M CO	State Range Dist.	A. H. Clark	622 Montgom'y st
ALBANY S M CO	Telescope District	David Wilder	522 Montgom'y st
ALBANY S M CO	Esmeralda District	T. L. Bibbins	305 Montgom'y st
ALBANY S M CO	Esmeralda District	T. L. Bibbins	305 Montgom'y st
ALBANY S M CO	Virginia District	C. V. Hobart	505 Montgom'y st
ALBANY S M CO	Esmeralda District	C. V. Hobart	505 Montgom'y st
ALBANY S M CO	Humboldt District	F. B. Post	Lucas & Turner bgs
ALBANY S M CO	Esmeralda District	J. F. Smith	4 Armory Hall
ALBANY S M CO	Esmeralda District	Joseph R. Beaid	4 Armory Hall
ALBANY S M CO	Esmeralda District	J. H. Purkitt	Custom House
ALBANY S M CO	Esmeralda District	John Woodthorpe	326 City st
ALBANY S M CO	Flowerly District	David Wilder	522 Mont'ry st
ALBANY S M CO	Rock Springs Dist.	M. G. Elmore	528 Montgom'y st
ALBANY S M CO	Placer County	M. G. Elmore	528 Montgom'y st
ALBANY S M CO	Del Monte District	E. Barry	636 Sacramento st
ALBANY S M CO	Esmeralda District	Henry Toomey	cor Mont & Cal. st.
ALBANY S M CO	Virginia District	Henry Toomey	cor Mont & Cal. st.
ALBANY S M CO	Flowerly District	James Peck	707 Sansome st.
ALBANY S M CO	Esmeralda District	A. Davidson	Oakland
ALBANY S M CO	San Antonio L. Cal	A. S. Gould	508 City Street
ALBANY S M CO	Devil's Gate Dist.	J. H. Brewer	40 Montgom'y Blk
ALBANY S M CO	Aurora, Mono Co.	J. F. Bailey	605 Sacramento st
ALBANY S M CO	Bu. Yris. dis. Hum.	J. S. Luty	305 Montgom'y st
ALBANY S M CO	Esmeralda Slopes	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District	J. W. Lawton	400 Montgom'y st
ALBANY S M CO	Esmeralda District		

Name of Company	Location of Mine	Secretary	Locality of Office
HALL & NORCKORSE	Virginia District	J. F. Lightner	Metropolitan bl'k.
HARRIS..... G & S	Humboldt Nev. Ter.	L. Franconi	Lucas A Turner bldg
HAWLEY..... G & S	Devil's Gate Dist.	C. Stevens	6 Parrots Building
HATFIELD..... G & S	Esmeralda District	J. H. Purkitt	Custom House....
HDA G. S. M. Co.	Russa District.....	Daniel Wilder	522 Montgomery st
HAIGH..... G & S	Esmeralda District	J. H. Blood	Montgomery st
HEWITT..... G & S	Devil's Gate.....	Samuel Marx	010 Washington st
JEWELL..... G & S	Coso District.....	W. W. Lawton	400 Montgom'y st
JASON M Co	Sierra District.....	L. Maubee	716 Montgom'y st
JEFFERSON..... G & S	Gold Flat Nev Co	T. L. Bibbins	305 Montgom'y st
KANCASTER M & CO	Humboldt co. N T	C. Weitzman	302 Montgom'y st
KROOK..... G & S	Esmeralda District	G. H. Wakelee	62 Merchnt str
KRUEGER BROS	San Antonio, Tex.	W. H. Clarke	Lucas A Turner bldg
KOHLER..... G & S	San Antonio, Tex.	L. Kohler Bros	Sausome street....
KOHLER..... G & S	Esmeralda District	James Neary	326 Clay st....
LA BLANCA M Co	Soanora, Mexico....	Gla's Frieburg	408 Clay street..
LAVE YANKKE G & S	Slate Range Distr	W. W. Lawton	400 Montgom'y st
LADY WASHINGTON	Slate Range Distr	W. W. Lawton	400 Montgom'y st
LOCKENE M'G Co	Gold Hill District	J. S. Paxson	
LA ARMISTAD	Santiago District.	V. B. Post	Lucas A Turners bldg
LEIGHTON TUB. Co	Esmeralda District	Joseph R. Beard	4 Armory Hall....
LEE CRUCIANT M Co	Mexico.....	C. J. Breuham	Cor. Jack'n & Frank
LIVINGSTON..... G & S	Esmeralda District	James Neary	326 Clay st....
IOWA..... G & S	Virginia District.	R. N. Van Brunt	706 Montgm'y st
LATROBE T & M Co	Virginia District.	R. N. Van Brunt	706 Montgm'y st
LOUISA..... G & S	Silver City District	J. F. Pope	115 California st
LYNE OAK COPPER Co	Gopher, Calav Co	J. H. Gager	Merchstr. mntbl'k
MACFARLANE..... G & S	San Antonio, Tex.	W. H. Clarke	411 Clay st....
LA PLATA..... G & S	Lower Mexico....	John W. Gould	400 Montgm'y st
LA BLANCA	Soanora, Mex Co	Chas Friedberg	408 Clay st....
LADY BRVAN, G & S	Flowersy District	J. F. Bailey	605 Sacramento st
LAUREL HILL MG Co	Tuolumne County	John B. Rossell	400 Montgom'y st
LILLY OF THE WEST.	Esmeralda District	F. L. Bibbins	305 Montg'm'y st
MAYFLOWER..... G & S	Esmeralda District	Wm L. Duncan	Pioneer Building.
MILWAUKEE..... G & S	Slate Range.....	W. H. Clarke	224 Montgomery st
MONTAGNA..... G & S	Slate Range.....	W. H. Clarke	224 Montgomery st
MOUNTAIN VIEW AG	Slate Range.....	W. H. Clarke	224 Montgomery st
MILONES & STANGS	Calaveras County	L. Franconi	Lucas A Turner bldg
MANZAN LLA MING Co	Sisaloon, Mexico	Th's Brownjohn	1021 Clay Street.
MOSS..... G & S	Virginia District.	R. T. C. Page	628 Montgom'y st.
MADISON..... G & S	Virginia District.	P. B. Cornwall	608 Merchant str.
MT. DAVIDSON G & S	Virginia District.	E. A. Fabens	47 Montgom'y Blk
MURKIN..... G & S	Virginia District.	F. B. Holmes	712 Montgom'y str
MADISON MORA	Shute Range.....	Edmund G. Barry	138 Merchnt str
MOHAVE, G. S. & C	La Paz, Colorado.	G. J. Turner	606 Montgom'y st
MIDINA..... G & S	Esmeralda District	John Crowley	428 Montgom'y st.
MONITOR..... G & S	Slate Range Distr	John Crowley	428 Montgom'y st.
MONTE CRISTO.....	Virginia District.	E. B. Holmes	712 Montgom'y st.
METROPOLITAN Cop.	Copperopolis.....	P. B. Cornwall	608 Merchant str.
MADISON..... G & S	Virginia District.	F. B. Cornwall	908 Merchant str.
MOUNT PARK, No. 1.	Virginia Gold Hill	Thos Brownjohn	608 Clay street.
MUSCATTAN..... G & S	Humboldt dist. n.t.	J. H. Gager	Merchstr. mt bl'k
NIMMA PRIETA.....	Soanora, Mexico	J. P. Nourse	Lucas A Turners bldg
NMMOTH CO. G & S	Excelsior District.	M. G. Elmore	706 Montgom'y st
NMINNHAIA, Copper	Carmen Island....	S. P. Howes	No 8 Wells Blding
NORTH STAR..... G & S	Humboldt, N. Ter.	J. H. Gager	Merchstr. mt bl'k
NAPOLSON COP. Co.	Calaveras county	R. C. Alden	120 Montgom'y st
NORTH STAR..... M Co	Mariposa District.	E. B. Bremer	306 Sacramento st
NOBLE C M Co	Calaveras county	E. B. Bremer	306 Sacramento st
NORTH PORTOLI.....	Virginia District.	E. V. Joice	Cor. Bat. & Wash.
NORMAN..... G & S	Virginia District.	J. H. Brewer	10 Montgom'y Blk
NEVADA COP. M Co	Grass Val. Nev.co	Jno Armstrong	10 Merchant str.
NEVADA..... G & S	Nevada Distr., Cal.	S. Pinkham	Front street....
NEVADA Mining Co	Esmeralda District	P. B. Cornwall	608 Merchant str.
NORTON..... G & S	Virginia District.	R. N. Van Brunt	706 Montgm'y st
NORTH PARK.....	Virginia District.	A. H. Clark	522 Montgom'y st
OCCIDENTAL..... M Co	Soledad District.	E. Barry	636 Sacramento st
ONIDA..... G & S	Esmeralda District	E. Daniels	Asiolar Custom hse
CLEAR CREEK G & S	Eagle & Wasbo dis	C. Stevens	6 Parrots Building
OCCIDENTAL..... G & S	Emma Francis dis	J. H. Gager	Mercht st, mt bl'k
PAINE..... S & C	Clayton District.	M. G. Elmore	528 Montgom'y st
PENYA..... S & S	San Antonio Distr	J. N. Thorne	411 Clay st....
POTOSI..... G & S	Virginia District.	J. F. Lightner	Metropolitan bl'k.
POTTER..... G & S	Virginia District	R. C. Page	605 Sacramento st
PIONEER COSO G & S	Coso District.....	E. B. Holmes	712 Montgom'y st
PYTHONA..... G & S	Virginia Dist.....	C. Stevens	6 Parrots Building
PACIFIC..... G & S	Esmeralda District	H. R. Reed	321 Washington st
PROSPERO..... G & S	Humboldt District.	V. B. Post	Lucas & Turner bldg
PIED OF THE W WEST	Esmeralda District	John Crowley	428 Montgom'y st.
PEELLESS..... G & S	Buena Vista Dist.	A. I Chamberlin	413 Montgom'y et.
PORTELLA..... G & S	Slate Range Distr	A. H. Clark	508 Merchnt str
PHILADELPHIA.....	Slate Range Distr	A. H. Clark	508 Merchnt str
RIP VAN WINKLE.....	Esmeralda District	M. G. Elmore	628 Montgom'y st
RUBY..... G & S	Strat District.....	W. H. Martin	617 Clay street
RHODES DIGGINGS	Sacramento Count	Gve. Touchard	414 Montgom'y st
RHOES N. Ex..... G	Rhodes District.	L. Maubee	716 Montgom'y et.
REESE RIVER G & S	Reese River Distr	R. N. Van Brunt	706 Montgm'y st
ROEIS..... G & S	Flowersy District.	J. F. Pope	115 California st
ROEIS..... G & S	Flowersy District.	J. F. Pope	115 California st
ROCHSTER..... G & S	Slate Range Distr	A. H. Clark	522 Montgom'y st
RD WHITE & BLUE.....	Esmeralda District	T. L. Bibbins	305 Montgom'y st
RUTH WINDSOR T Co	Esmeralda District	T. L. Bibbins	305 Montgom'y st
SAN CARLOS EXPL Co	Inyo District.....	W. W. Lawton	400 Montgom'y st
SOLEDA..... G & S	Soledad District.....	E. Barry	636 Sacramento st
SCHMUTZNER. G & S	American ds Hum	M. G. Elmore	628 Montgom'y st
SAN FRAX G & S M Co	San Franice o.....	M. G. Elmore	628 Montgom'y st
SAN FRANCISCO.....	San Francisco.....	W. H. Martin	617 Clay street
SANTA ROSA..... G & S	Virginia District.	Nelson Hudson	Front street....
SACRAMENTO.....	Virginia District.	S. W. Moore	408 California st
SILVER CITY..... G & S	Silver City.....	O. Risdon, Jr.	Cor. Bat & Bush st
SUCCOR..... G & S	Gold Hill District.	R. H. Waller	1 Montgom'y bl'k
SIBERRA..... G & S	Genoa District.....	S. P. Vandye	127 Clay street..
SILVER CITY Q M Co	Silver city.....	E. Bauer	414 Washington st
SL. LEWIS..... G & S	Esmeralda District	C. W. Gamers	62 Merchnt str.
SL. LEWIS..... G & S	Esmeralda District	W. H. Martin	617 Clay street
SIERRA NEVADA.....	Virginia District.	J. H. Brewer	40 Montgom'y Blk
SANTIAGO..... G & S	Silver City District	E. A. Breed	608 Merchant str.
SAM UTAH.....	Esmeralda District	P. B. Cornwall	7 Montgm'y Blk
SAM PATCH..... G & S	Esmeralda District	E. Worth	547 Washington st
SAM WRIGHT.....	Aurora, Mono Co.	E. Worth	547 Washington st
SL. CLAIR..... G & S	Aurora, Mono Co.	E. Worth	547 Washington st
SL. LEWIS..... G & S	Esmeralda District	John Crowley	428 Montgom'y st
SOL FLEWIS..... G & S	Esmeralda District	A. I Chamberlin	413 Montgom'y et.
ST. GEORGE..... G & S	Humboldt District	L. Franconi	Lucas A Turners bldg
SCOTT EXPL & M Co.	Buena Vista Distr.	J. S. Luty	305 Montgm'y st
SOUTH PORTOLI.....	Monterey, Califor.	Geo E. Whitney	9 Montgomeyry bl'k
SALINAS..... G & S	Esmeralda District	P. B. Cornwall	608 Merchant str
SOLDADO..... G & S	Soledad Dis. Los An	Geo H. Clark	608 Sacramento st
SOLIDA..... G & S	Soledad Dis. Los An	R. N. Van Brunt	706 Montgm'y st
SAVAGE MC Co	Virginia Dist.....	G. B. McNeary	712 Montgm'y st
SILVER HILL, Cousol	Esmeralda District	S. Pattee	522 Montgom'y st
STAYLIFT..... G & S	Humboldt District	J. H. Gager	Mercht st, mt bl'k
SIGEL..... G & S	Humboldt, N. Ter.	J. H. Gager	Mercht st, mt bl'k
SLATE RANGE, G & S	Slate Range Distr	A. H. Clark	522 Montgom'y st

Name of Company	Locality of Mine	Secretary	Locality of Office
SOKOGAME . . . G & S	Emeralds District	T. L. Bibbins . . .	306 Montgomery st.
STOKES . . . G & S	Emeralds District	F. Bibbins . . .	200 Montgomery st.
JENO . . . G & S	Emeralds District	M. G. Elmore . . .	528 Montgomery st.
SAN ANTONIO . . . S	San Antonio, I. C.	P. Van Pelt . . .	312 Sansone st.
TABLE MTN COP. CO.	Calaveras County	M. G. Elmore . . .	528 Montgomery st.
TSURUO . . . G & S	Lower California	H. C. Kibbee . . .	cor Sansone & Cal
TRINITY . . . G & S	Emeralds District	J. H. Blood . . .	7 Montgomery Bldg
TRISTON . . . G & S	Virginia District	Shelverick . . .	Mer. st. Montgomery st.
TRANS-MONTANE CO.	Stech Deuch Esmt	W. W. Wood . . .	528 Montgomery st.
TITON G & S M. CO.	Virginia District	W. E. Moody . . .	746 Montgomery st.
NIGHTINGILL, G. & S	Umnabar District	A. L. Chamberlin	413 Montgomery st.
TECHTACUAP, G. & S	Cosco District	E. B. Holmes . . .	712 Montgomery st.
TUCKER TUBBEL CO.	Emeralds District	P. B. Cornwall . .	608 Merchant st.
TUCKER . . . G & S	Emeralds District	P. B. Cornwall . .	608 Merchant st.
UNITED STATES G. & S	Virginia District	S. R. Rooney . . .	7 & 8 Gov't House
UNION . . . G & S	Virginia District	John B. Wood . . .	528 Montgomery st.
VILLENALVA MNG CO.	Lower California	D. Croigh . . .	cor Mont & Main
WEATCH S M CO.	Simpson's Park	E. B. Holmes . . .	712 Montgomery st.
VIRGINIA ROBERTS CO	Virginia District	E. B. Holmes . . .	712 Montgomery st.
VIRHARD . . . E & S	Emeralds District	James Neary . . .	326 Clay st.
WODEN . . . G & S	Monitor District	C. H. Wakelce . .	612 Merchant str.
YELLOW SPRINGS . .	Cosco District	J. H. Sayre . . .	224 Montgomery st.
WILLIAMSON . . . G & S	Virginia District	D. A. Jennings . .	Jackson, cor. Front
WASHINGTON . . . G & S	Slave Range District	W. W. Wood . . .	528 Montgomery st.
WILLIAM PENS G. CO.	Devils' Gate District	Henry Tomco . . .	cor. Mont & A
WEXOSKICH . . . G & S	Cosco District	V. B. Po . . .	Lucas & Turnerbg
WEST WEST Mfg CO	Emeralds District	Coal Deun . . .	325 Montgomery st.
WHITE & MURPHY . .	Virginia District	J. P. Nourse . . .	Lucas & Turners bg
WINONA . . . G & S	Monitor District	M. G. Elmore . . .	528 Montgomery st.

A PIRATE'S SALARY.—The head gunner on the pirate Alabama, is one of the most accomplished artillerists that was ever in the British navy. He was paid off and got his discharge a few weeks before the Alabama sailed, and instead of enlisting in her Majesty's navy, took a commission on the pirate at the very round sum of two hundred pounds sterling a month, in gold, which, at the present price of rebel paper, is the moderate salary of forty two thousand dollars a year.

**A New Work—Important to all Mining Companies.**

Wm. A. Andrews & Co., a new firm in New York, who propose to open a Pacific Mining Agency in that city, are preparing a work to be issued about the last of July, embracing a synoptical statement of all Mining Co's in this State and the adjoining Territories. It will be published in pamphlet form, and 50,000 copies distributed, *gratis*, in the Eastern States, with the intention of bringing Pacific Mining Stocks more particularly to notice in the East, for investment and information of the mass of the people, outside of the leading capitalists of New York and Eastern cities. Such companies as are prominent before the public, and those whose prospects are deemed worthy, will be embraced in the 1st Volume. A 2nd Volume will be issued to include all new companies formed subsequent to the compilation of the 1st. An opportunity will be offered to advertisers, for a few outside pages in the work. MR. LEON HARNETT is Advertising Agent, and MR. J. A. WOODSON, San Francisco Corresponding Agent, of whom further information can be had.

All Companies upon whom the Agents have not called, will please address us as above, and answer, as full as may be, the following questions :—

1. Name of Company.
2. When discovered.
3. Where located.
4. When incorporated, and where.
5. Extent of Claim.
6. Capital Stock.
7. No. of Shares.
8. Assay per ton : Gold, Silver, and Copper.
9. President and Secretary, Board of Trust's.
10. Location of Office.
11. Such additional information as may not be answers to the foregoing interrogatories

Note.—Specimens of Ore requested, labeled, for reference in Cabinet of New York Office.

W. A. ANDREWS & Co.,  
Pacific Mining Stock Agents, New York.

## SPECIAL NOTICE

We wish it distinctly understood that all the interest which Julius Silversmith ever had in the MINING AND SCIENTIFIC PRESS, ceased in November of 1862. EWER & SMITH are now the publishers and proprietors.



## THE MINERS' LABORATORY.—NO. IX.

## DESCRIPTION OF THE MODE OF DRESSING COPPER-ORES IN CORNWALL.

The ores consist chiefly of copper-pyrites, intermixed with small quantities of other cupriforous minerals, iron pyrites and the constituents of the vein in which the ore is found.

The ore is drawn from the shaft to about 30 feet above the surface and taken in wagons to an adjoining dressing floor, where it is allowed to fall from this height on two rows of inclined bars, by which means it is separated into three divisions or sizes, called *ricks*, *roughs* and *smalls*, for convenience of dressing. In the first or top row of bars, which separates the rocks, the bars are 4 inches apart, and in the second row, which divides the *roughs* from the *smalls*, they are  $1\frac{1}{2}$  inches apart.

The *rocks* are broken by a process called *spalling*, into pieces of about one pound weight each. A small hammer called a *sledge*, is used in this operation, which is conducted generally by girls, who carefully separate the ore from the refuse. The richest part of the selected ore termed *prills*, is taken without any further preparation, to the crusher which consists of two iron cylinders, or rolls revolving against each other. They are worked by steam or water power, and between them the ore is passed, and reduced to a size small enough to pass through a sieve divided into holes of  $\frac{1}{2}$  inch square. The preparation of the ore is now completed. The poorest part of the ore selected from the *rocks*, called *dredge*, containing from 10 to 20 per cent. in copper, disseminated through a large bulk of matrix, is also crushed and passed through a sieve of holes about  $\frac{1}{4}$  inch square. This prepares it for what is called *jigging*, of which the object is the separation of the ore from its matrix. The ore is put into a sieve of holes one-sixth inch square, suspended in a large cistern of water. An up and down motion is then communicated to it by a break-staff, or lever worked either by girls or by steam or by water power. By this operation the lighter particles or refuse, on account of their lesser specific gravity rise on the top, and are carefully skimmed off with a small wooden scraper. The ore that passes through, together with what stands in the bottom of the sieve, is then ready for the market. The *roughs* from the second row of bars are placed under a stream of water to clean the ore from all extraneous matter, so that the copper ore may, from its colour, be readily distinguished from the refuse, which is easily separated by what is termed *hand picking*, an operation conducted by girls who sit on tables near the stream. The picked ore by this operation is divided into *prills* and *dredge* and treated by the methods before described.

The *smalls* from the first operation are thrown on a gridle or sieve of holes  $\frac{1}{2}$  inch square; the coarse or larger particles which do not pass through, are subjected to precisely the same treatment as the *roughs*, and the fine and smaller particles, if rich are ready for the market; but if poor they are jigged through a sieve of holes  $\frac{1}{4}$  inch square preparatory to sampling.

The *prills* and *smalls* are then carefully mixed together into one pile or parcel, the *dredge* usually forming a separate parcel. The pile is then equally divided into 4 or 6 sub piles, or *doles*, the number being regulated by the weight of the parcel; if above 20 tons it is divided into 6 *doles*, and if below that weight into 4 only. This division into *doles* is effected by means of a measure called a *barrow* which when exactly filled with the ore weighs about  $1\frac{1}{2}$  cwt., the number of *barrows* is carefully noticed, and, the exact weight of one being ascertained, a rough estimate of the total weight of the parcel can then be arrived at for the ticketing or sale.

**SEPARATING SILVER FROM LEAD.**—The Nevada Transcript says that the Messrs Cassamayo, formerly of Nevada, have discovered a process by which the silver can be separated from the lead at a trifling expense, and are busily engaged in arranging the machinery of their mill. Their ledge is very rich in silver, but being mixed with lead has proven unprofitable, owing to the heavy expense of separating it. The ledge and mill are in close proximity to each other, and are situated about one mile and a half north-west of Washoe.

## A NEW INFLAMMABLE GAS.

Every new discovery in science, which it extends the dominion of useful knowledge, also offers up wider and grander prospects for future explorations. Rapid as have been the recent advances in chemical science; great as are the triumphs already due to researches in this direction, still, how little is actually known of Nature's grand operations! Scarcely a scientific journal comes to us from the East that does not contain something new in the interesting science of Chemistry. The following account of an important discovery, recently announced, may be the entering wedge which will open up some other of Nature's deepest mysteries. We quote from the "London Journal of Gas Lighting."

At a late meeting of the Chemical Society, Mr. Parrett stated that, some time ago, while Messrs. Buff & Wohler were making some experiments upon electrolytic decomposition, they employed a plate of the metal aluminium as the negative terminal of the battery for the decomposition of water and, as soon as the electric current was established, they were surprised to find that, instead of pure hydrogen gas being evolved, as is usual with a platinum plate, a gas was evolved which inflamed spontaneously. Upon investigation, this was found to be composed of hydrogen and silicon, the latter being an impurity in the aluminium plate. Several processes have recently been adopted for preparing this gas. Silicated hydrogen and silicate of magnesium were found to furnish the best materials for producing it. Dr. Hofmann recommends the following mode of making it: Take 80 parts of fused chloride of magnesium, 70 parts of silicofluoride of potassium, 40 parts of sodium cut into small pieces, and 20 parts each of the chloride of potassium and sodium. These ingredients are mixed together dry, placed in a crucible, and quickly heated to redness. The product thus obtained is a silicate of magnesia ( $Mg_2 Si$ ). When this is triturated in a mortar with hydrochloric (muriatic) acid, it gives off an abundance of gas, which keeps up a lively combustion in the mortar. A bottleful of this gas, prepared by Dr. Hofmann, was let off by a tube, through a trough containing dilute hydrochloric acid, and, as it escaped in bubbles at the surface of the liquid, these inflamed immediately and spontaneously when they came in contact with the atmosphere. Each bubble produced a white flame, like that of phosphoretted hydrogen. The combustion formed flakes of silica, which resembled fumes of burning zinc. This is one of the most dangerous gasses, and further investigation may prove that many mysterious fires, directly attributed to spontaneous combustion, may be due to it. Dr. Hofmann believes it is a marsh gas, of the silicon series.

**SPONTANEOUS COMBUSTION.**—A shaft has been sunk on the Home Ledge (copper) adjacent to the Alabaster Cave, in El Dorado county, to the depth of sixty feet, where a vein of copper sulphurets has been struck. When these sulphurets are raised to the surface, and exposed in the upper air about twenty-four hours combustion ensues, and the residuum resembles lava. The cause of the combustion has not been yet ascertained. The matter will be investigated by Prof. Whitney, State Geologist.

**COPPER FROM THE SOUTH.**—Some very rich samples of copper ore from the recently discovered mines in the Bill Williams' Fork District, New Mexico, were brought to this city by parties who recently arrived on the Steamer Senator.

**SANTA CLARA COLLEGE.**—We have received the "Prospectus" of this Collegiate Institute, containing a Catalogue of the Officers and Students for the year 1862—63; also the exercises of the 12th annual Commencement and the distribution of Premiums. The pamphlet also contains two beautiful lithographic views of the College.

**ST. IGNATIUS COLLEGE.**—The annual commencement of St. Ignatius College, of this city, takes place to-morrow. We acknowledge the reception of an invitation to be present at the exercises.

**THE HEIGHT OF VANDALISM.**—Some miserable wretch, has cut the stalk from the beautiful flowering shrub in the Custom House Park. Mr. Sanford has offered a reward of \$50, for the detection of the scoundrel.

## THE MINING SHARE MARKET.

The material improvement in the Mining Share Market, noted in our last issue, has, during the last six days, culminated in a perfect fever of excitement. The continued developments in the Gould & Curry, and the strike in the Hale & Norcross, has produced a most remarkable effect upon the shares of all companies on or near the line of the Comstock Ledge.

Gould & Curry advanced to \$6,300 early in the week, but subsequently declined to the same figure with which it closed the week previous—\$6,050. A dividend of \$150 per foot was declared on Friday—\$60,000 or \$50 per foot being carried forward to the coming month. The total amount of dividends was \$180,000. There is good reason for believing that the total earnings of this Company, for the coming year, over and above expenses, will exceed two and a half millions of dollars. The entire extent of the Company's ground is only 1200 feet.

Ophir Shares have been largely in demand during the week; 498 shares having changed hands at from \$2430 @ \$2700 per foot.

Savage has fully maintained its extraordinary advance of last week. The transactions in these shares have not been large, owing to the firmness of holders. This Company is now taking out large amounts of bullion, and a dividend is confidently expected the coming month. The receipts, for the present month, from the mine, are estimated at \$50,000.

Hale & Norcross has attracted considerable attention, at prices greatly fluctuating. 111 shares have changed hands at \$1600 @ \$2250. The market for the week opened at \$1600, advanced to \$2050, receded to 1700, again advanced to \$2250, and finally closed the week at \$2100.

Daney has also attracted considerable attention, with large transactions, at rates, quite uniform for an excitable market. Shares to the number of 313 have changed hands at \$352½ @ \$365.

Chollar has been sought for at rates ranging from \$740 @ \$1000. These shares experienced some little fluctuation but closed firm at \$900. The recent assessment of \$72 per foot has been made to effect a thorough opening of the claim. There is no apparent reason why this claim should not prove equally as valuable as the average of other ground on the Comstock lead.

Potosi has materially improved, though with limited transactions. It closed firm at \$700, an advance of \$200 over last week's quotations. The prospect of this mine is said to be highly satisfactory.

Wide West has seriously declined; opened at \$180 and fell to \$115, with a weak market, at the close. Silver Hill, transactions limited, at \$35. Antelope, \$225. Utah, \$85. Bamboo, but little dealt in. Pond, fell to \$20.

FROM HUMBOLDT we learn that prospecting is being done, generally with encouraging results, and extensive work is being performed on many of the old and recent discoveries. We have a table of Humboldt Mining Stocks, in course of preparation, which we hope to be able to give soon.

The last number of the Humboldt Register says that work is progressing finely on most of the old locations. The Manitowoc, Peru, Monitor, Sargent, Delirio, National, Alto, etc., all holding at good figures; and sales this week to thirty or forty thousand dollars. The highest offer we have heard for any was sixty dollars a share for Logan, on the Manitowoc ledge. Fall's mill has been running this week on rock from the National. Amalgamating now, and will commence immediately on Mars. No figures.

## THE COPPER INTEREST.

There is no apparent abatement in the Copper interest. Shipments are constantly being sent forward from the Calaveras and Amador mines.

Napoleon is now shipping an average of 6 tons per day, besides accumulating large quantities of 2nd and 3d quality ore for concentration. The stock of this company is held at prices largely in advance of buyers views. We notice no transactions during the week.

The Josaphine is driving up a working adit to their vein, which they hope to reach during the coming month. The work is being prosecuted night and day.

New and important developments are being made in that



portion of the Newton District, adjacent to the Mokelumne river on the south, and near Campo Seco. A new town has been laid out there, called Copper Centre. The principal Company is known as the Bull Run, which has a very promising ledge. They are now raising ore, having recently put up hoisting works, assorting sheds, etc. Quite a number of other Companies are operating in the same neighborhood, from whom we expect to hear good reports in due time.

The Newton Company has commenced sinking a new shaft, in order to secure a proper degree of ventilation for their mine. Work has been temporarily suspended in the old working by reason of foul air.

Knowledge of the Copper belt is being constantly extended northward. We hear of late and important developments in Yuba and Butte counties. An important discovery of Blue Malachite has recently been made near Oroville, which is pronounced by competent judges, in this city, as presenting the most promising indications yet developed in the way of Copper Mining.

The Eureka Co., Green Ledge, Nevada County, has ten tons of ore now on the way to this city, the first shipment from that county.

Considerable attention is beginning to be directed to Copper on the Eastern Slope. That region is undoubtedly rich in this mineral, and the prospect of the early establishment of railroad communication across the mountains, gives encouragement to immediate and thorough development of these mines, hitherto considered valueless for present working.

#### ESMERALDA CORRESPONDENCE.

The various Ledges in Esmeralda District are being more thoroughly worked than at any period since the discovery of the mines—the result of which has caused considerable activity in stocks the past week.

The Red, White and Blue, on Silver Hill, is turning out very rich rock. The old shaft is down to a depth of 70 ft. A second shaft has been sunk to a depth of 40 feet and the ledge is now over 8 feet wide. About 30 tons of rock has been taken out ready for crushing, which will pay from \$40 to \$60 per ton—the work is being vigorously prosecuted and from 8 to 10 tons per day is being taken out.

The Clan-Alpine on Last Chance Hill is yielding rich rock. The shaft is down to a depth of 30 feet and the ledge is 4 feet wide. About fifteen tons of rock have been taken out, which pays over \$100 per ton.

The last crushing from the "Ural" yielded 852 ounces. Fourteen tons from the Midnight paid \$1950. A crushing of 35 tons from the "Western Summit" yielded \$2400.

Twenty-two tons from the "Crockett" yielded \$3200. The last crushing of thirteen tons from the "Broderick" paid \$1350.

There is more rock being taken out at the present time than can be crushed by the various Mills in the District.

**SUBSCRIBE.**—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, cannot be bought from the shelves of any bookstore in the country for the price of several years' subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so for meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

### GENERAL MINING STOCK REPORT.

#### REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending June 27, 1863.

Names of Companies.	Total No. Shrs	Shares per ft	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2300	2470	2675	2550	2625	2440
Gould & Curry	4,800	4	500	6300	6300	6100	6100	6050	6050
Central	1,800	12	300	—	—	—	—	—	—
California	3,800	12	300	—	—	—	—	—	—
Chollar	6,800	4	500	650	620	1000	800	830	900
Potosi	2,800	2	500	600	650	710	720	—	—
Hale & Norcross	8	0	2500	1400	2000	1550	1600	2100	2000
Sierra Nevada	3,000	1	500	51	55	65	72½	72½	57½
Danby	8,000	4	500	360	370	375	380	360	355
Burning Moscow	4,800	2	100	160	120	140	160	150	180
North Potosi	2,000	1	300	30	39	62½	62½	50	—
Rogers, F. D.	3,000	1	250	—	20	28	30	37½	40
Meredith	7,200	12	125	—	80	75	70	—	—
Charles Canyon	1,800	1	300	80	80	75	70	—	—
Sacramento	1,800	1	500	—	—	67½	80	76	77½
Lacuerue	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	3850	3850	—	—	3600	—
Iowa	—	1	—	—	92½	90	117½	136	136
El Dorado	—	1	—	60	70	95	85	100	100
Norton	1,000	1	—	15	13½	16	14	13½	10
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	18	15	—	17	17	17
Adriatic	—	—	—	3	4	4½	5	6	6
Brennus	—	—	—	—	—	6	—	—	—
Cedar Hill Tunnel	10,000	1	100	—	2½	2	2½	—	—
Mount Davidson	10,000	1	200	—	3½	3½	—	—	—
Pride of the West	—	—	—	100	108	130	146	125	115
G. H. Quartz M. Co.	—	—	—	—	250	—	—	250	—
Imperial	—	—	—	—	465	—	—	—	—
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	1	600	185	175	175	170	160	125
Autelope	1,200	1	500	—	225	—	21	22½	—
Esmeralda	1,800	3	1000	—	22	—	—	—	—
Real Del Monte	4,400	1	400	120	125	—	140	—	—
Etna	1,200	1	100	—	—	—	—	—	—
Utah	1,800	—	250	72½	85	85	85	80	75
Silver Hill	3,000	1	500	34	34	32	36	35	34
Nevada	1,200	—	250	20	—	—	—	—	—
Federal Hope	—	—	—	—	2½	—	2½	60	—
Jeany Lind	—	—	—	—	—	7	7	—	—
Falls of Clyde	—	—	—	—	—	7	7	—	—
Subban, s. w. ex.	—	—	—	—	—	—	—	—	—
Bamboo	600	1	500	50	47½	50	50	50	40
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	7	6	9½	10	11	11
Coso	1,600	1	600	—	—	—	—	—	—
Willow Springs	2,700	1	100	5	—	—	3	—	—
Empire	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	—	1000	—	—	—	—	—	—
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	90	—	—	—	80	—
Josephine	—	—	—	35	—	—	—	35	—
<b>CALIFORNIA STOCKS.</b>									
Cedar Hill	—	—	—	2	2	2	2	2	2
Utah	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	—	—	—	—	—	—

Norton	8	10
Oakland	12	15
Oregon	3½	5
Pride of the West	12	15
Peyton	28	30
Peorman	150	200
Perseverance	—	40
Rogers	—	70
Recorder	8	10
Santa Rita	36	40
Santa Fe	10	12
Sitro	10	12
St. George	10	12

<b>Devil's Gate District.</b>		
Governor Nye	9	10
Hayley	25	30
Monte Christo	7	8
Pride of the West	145	150
Winchester	6	—
Wide West	12	15
<b>Flowery District.</b>		
Atwill	—	—
Adriatic	3	4
Lady Bryan	5	6
Harrison	5	6
Uncle Sam	5	—

#### ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, June 28, 1863.]

	Bid.	Asked		Bid	Ask'd
Alpine	\$4	10	Kearney	20	—
Amador	—	5	Live Yankee	15	—
Atlantic	—	5	Lord Hyron	7	12
Autelope	—	10	La Plata	7½	12
Autelope	200	—	Old Esmeralda	—	40
Alturas	15	20	Monroe	—	—
Etna	—	—	McKinstry Tunnel Co.	5	—
Brazil	15	20	Monte Christo, Tunnel co.	—	40
Rodie Bluff Consolidation	—	20	Mutual	—	10
Rodie Peak, Bodie District	—	8	Mount Braley	—	10
Bright Star	10	15	Mary L. Gardiner	100	125
Bamboo	60	—	Mina Real	4	6
Bullion (Van Horn Dist.)	—	10	Meredith	—	15
Bodie Bluff, No. 1	12	16	North Willow Springs	20	30
Bodie Bluff, No. 2	—	6	New Esmeralda Consol.	—	6
Bunker Hill	10	10	Newton	60	—
Bouaparte, Tunnel comp.	5	—	Nevada, (Tunnel)	—	15
Gaueslab	—	25	Ozark	—	20
General Hodder	10	10	Old Winchester	3	6
Crockett	85	100	Paul Tunnel Co.	—	—
Cape	—	5	Pacific	15	—
Clan Alpine	12	20	Pond	—	—
Davis, consolidation	—	5	Pride of Autelope	10	15
Durbin	—	9	Peru (two ft. to the share)	—	15
Delta	—	8	Pennsylvania Tunnel Co.	6	10
East Essex Ex. Ural	—	12	Real Del Monte	—	—
Excelsior, Excelsior Dist.	—	10	Reliance	—	15
Empire	28	—	Red White & Blue	—	20
Franklin, Tunnel company	—	10	Stanford Tunnel Co.	—	15
Fallstaff	20	—	Schenectady	7	10
Fallstaff, Consolidation	4	5	Strawberry	20	—
Fresno	9	12	Silver Hill	34	—
Falls of Clyde	—	8	Silver Hill, Bodie District	—	7
Great Eastern	15	20	Seymour	25	—
General Hodder (Con.)	14	25	St. Louis	—	6
General Jackson	13½	14	Tasca	—	3
Garibaldi	15	30	Tiger	—	4
Golden Harvest	—	5	Tucker	—	15
Golden Cross	15	20	Tennessee	12	25
Governor Seymour	—	25	Union Tunnel	20	30
Golden Age	32	45	Utah	—	150
Great Britain	6	9	Ural proper	—	250
"Golden Era" Tunnel Co.	2	3	Ural extension	—	10
Greenback	20	35	William Tell	—	2½
Hanover	—	10	Wide West	—	190
Howard Tunnel Co.	—	15	Washington, Tunnel comp.	4	—
Heath	12	15	Western Summit	—	50
Herman Consol	—	15	X-Eliza and Constantinople	—	—
Homa Check, Excelsior Dis	3	5	consolidated.	1½	—
Jaulata	10	18	Yancey	45	60
			Cucumat	25	30

#### REMARKS

Considerable activity has been manifested in the Stock Market of Esmeralda District, the past few days, and a number of claims have changed hands at an advanced figure.

Ten thousand five hundred ounces (10,500 oz.) of bullion has been shipped from this District within the past four days and the amount in preparation for the next ten days will far exceed that figure.

#### THEATRICALS.

**McGUIRE'S OPERA HOUSE.** At this place the week has been chiefly occupied with East Lynn, one of those intensely sensational pieces, which at times arrest and absorb the public interest. Considering the painful moral of the play, it may, perhaps, be considered an indication of the improved taste of our citizens, to find the house crowded every night to its utmost capacity. Apart from the merits of the piece, however, the performance has been excellent, all exerting themselves to justify the patronage, so liberally extended by the intelligence and respectability of the city. So far as we catch the expression of public opinion, it is one of entire satisfaction, particularly with Mrs. Hayne, Mrs. Perry, Mrs. Mowbray, Messrs Taylor, Anderson, Mayo and Thorne. No doubt the Management are equally satisfied. On Friday, Mayo, and Saturday, Mrs. Hayne, took their benefits.

**EUREKA.**—At this little temple of fun, there has been no thing especially new since our last issue, except the burlesque Opera of "Oh Hush," in which the peculiar talents of the troupe appear to advantage. The singing and performance, as usual, have been good, and the house crowded to excess. We shall endeavor to aid this success; for the minstrels, in every respect, deserve the patronage they enjoy.

**DASHAWAY HALL.**—Do not forget the Histrionic and the Ball at this place to-night. Let those who can afford a dollar, go by all means, and we warrant they will not be disappointed.

#### VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, June 18, 1863.

	Bid.	Ask'd		Bid	Ask'd
Virginia Mining District.					
Ashland	\$	9 10	Sierra Nevada	\$	55 60
Allen	—	90 100	Sacramento	—	65 75
Atchison	—	150 —	Shamrock	—	15 —
Alturas	—	3 5	Texas	—	— —
Belvedere	—	35 40	Union	—	100 —
Birdsall	—	25 30	U. S. Tunnel	—	4 5
Bjazzet and Golden Era	—	30 35	Utah	—	65 70
Burnside	—	18 20	Old Virginia	—	250 —
Burning Moscow	—	150 160	Washington	—	5 —
Beach-Paxton	—	90 100	York	—	6 8
Bloomington	—	5 7	Zouavo	—	17 20
Ceresus (Buchanan)	—	250 —	Gold Hill District.		
Cedar Hill Tunnel	—	15 20	Alpha	—	700 750
Cole	—	15 20	Baltic	—	160 —
Commercial	—	15 20	Bullion	—	75 80
Consolidated Cedar Hill	—	3 3½	Belcher	—	1000 1200
Durbin	—	3 5	Branch Mint	—	7 —
Empire	—	85 90	Caledonia	—	35 40
El Dorado	—	85 90	Coppers	—	6 8
Florida	—	200 225	Eureka	—	20 22
Grass Valley	—	55 60	Forcade & Ricard	—	6 8
Hazel Green	—	5 7	Gold Hill, Big Ledge	—	50 60
Harrison, Virginia Incorpor	—	18 25	Golden Gate	—	— 5
Harrison, San, Fran. Incorpor	—	15 —	Golden Eagle (No.1)	—	12 15
Irving	—	10 —	Hawkeye	—	20 25
Insurance	—	25 30	Hudson	—	200 250
Jewett	—	11 120	Koh-i-noor	—	175 175
Indus	—	5 6	Leach	—	150 —
Juniata	—	7 10	Laboring	—	12 —
Keystone	—	25 30	Lacuerue	—	18 —
Kenosha	—	8 10	Mary Ann	—	35 40
La Crosse	—	10 12	North American	—	35 40
Lancaster	—	8 10	North Ophir	—	3 4
Monte Cristo	—	25 30	Overman	—	190 200
Meredith	—	30 35	Oreana	—	5 —
Mt. Davidson	—	5 6	Omega	—	500 500
Massillon	—	10 12	Princess	—	90 95
McDee	—	— 25	Sinaloa	—	15 20
Milton	—	60 65	Sweezy	—	— —
Monarch	—	70 75	Stephenson-Kehoe	—	8 9
Monahan	—	70 75	Union	—	40 45
Moberg	—	10 12	Yellow Jacket	—	800 950
			Uncle Sam	—	2 5
			Yolo	—	25 30



**J. F. & H. H. SCHAFER**  
Manufacturers of and Dealers in  
**BEDDING and FURNITURE,**  
of every description,  
Blankets, Comforters, Sheets, Etc., Etc.  
Nos. 504 and 506 Sansome Street,  
(Near Clay.) San Francisco.

This Establishment is now generally known to be the  
Cheapest Place in the City for good Bedding.  
Branch Store.....Road St., Nevada.

**Pacific Mail Steamship Company.**

## NOTICE.

**ARRANGEMENTS HAVE BEEN MADE**  
by which shipments of

**Gold, Silver and Cop-  
per Ores**

can be forwarded under through Bills of Lading from  
San Francisco to England, at reasonable rates. For fur-  
ther particulars apply to

**A. B. FORBES, Agent,**  
284f Corner Sacramento and Leidesdorff streets.

**Miners' Foundry**

—AND—

**MACHINE WORKS,**

**First St., between Howard & Folsom,**  
SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS MACHINERY,** the Best and Most Economical, manufactured  
in the State of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flower, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgam-  
ators and Water Wheels—some in operation and on exhi-  
bition.

\* Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.

All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere

**HOWLAND, ANGEL & KING**  
San Francisco, February 23, 1863.

**W. BOHM, INVENTOR & PATENTEE**

**THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the**  
construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
possesses several very important improvements over any  
other in use.

The invention having been carefully examined at the  
Patent Office, has been adjudged to be a useful improve-  
ment, and Letters Patent have been granted for 17 years.  
It excels all other buckles in  
**Usefulness, Strength and Appearance.**

The Public is respectfully invited to call and examine  
this Buckle at the Jewelry Establishment of

**BRAVERMAN & LEVY,**  
621 Washington Street, San Francisco.  
**JOSEPH, BROTHERS,**  
607 Montgomery Street, San Francisco.  
**FLOBERG & CONRAD,**  
118 I Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold will be guaranteed as to its Strength  
and Durability. **W. BOHM, Patentee.**

### Gird's Budding Knife.

**THE ATTENTION OF FARMERS, HORTICULTURISTS**  
and Cutlers, or manufacturers of Horticultural  
implements, are referred to the above invention. For  
description and engraving see **MINING AND SCIENTIFIC**  
**PRESS** No. 24, vol. v.

State, Territory and workshop rights for sale at reason-  
able prices.  
Address, Publishers of Mining & Scientific Press,  
(Agent for Patentee.)  
San Francisco  
sept-3m

**JAMES PHELAN,**

(LATE J. & M. PHELAN.)

**IMPORTER AND JOBBER,**

**Wines, Liquors, Etc., Etc.,**  
Nos. 616 & 618 Front street,

**P. DONAHUE, H. J. BOOTH, C. S. HIGGINS.**

**UNION**  
**IRON AND BRASS FOUNDRY.**

(The First Established in the State.)

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

**HAVING ADDED TO THE SEVERAL**  
Departments all the recently improved Tools, this  
Establishment is now the most Extensive and Complete  
of any on the Pacific Coast.

The undersigned are prepared to furnish, at short no-  
tice, Locomotive, Marine and Stationary Engines, of ev-  
ery size and description.

### BOILERS.

Locomotive, Fine, Tubular, Upright and Cylinder, fur-  
nished with or without engines, complete.  
Machinery and Castings of every description, Saw-  
mills, Grist Mills, Car Wheels, Derrick Irons, etc.

**QUARTZ CRUSHING BATTERIES,**  
Embracing a great variety of Stamp, Mortar and Cam  
Patterns.

**AMALGAMATING MACHINERY,**  
Varney's Improved Patent Pans and Settlers, Wakely  
Pans, Amalgamating Tubs, Plaisied's Grinders, Chile  
Mills, Concentrators, etc., etc.

### MINING PUMPS.

Cornish, Lift and Force Pumps, from four to  
eight feet stroke, with Pipes, Bob Mountings, and Gear-  
ing complete.

### HOISTING DRUMS.

For Shafts or Inclines, with clutch, friction or V cone S  
Sole Agents and Manufacturers for the Pacific Coast, O.  
C. and G. M. Woodward's Celebrated Patent Safety  
Steam Pumps and Fire Engines.

All Contracts and Orders executed with promptness  
and dispatch, and at reduced prices for Cash.  
je21 **DONAHUE, BOOTH, & CO.**

### Giffards Injectors,

**FOR SUPPLYING BOILERS WITH FEED WATER**  
without Pumps No Mill or Mining Company  
should be without one of these valuable Instruments.  
Send for a Circular.

**DAVID STODDART, Agent,**  
je22 Cor. Pine and Front Sts., San Francisco.

**I. C. E. KLEPZIG & CO.,**

**GUN MAKERS,**

....AND....

**DEALERS IN GUN MATERIALS,**

**733 Washington street, San Francisco,**  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.

Gilding, and also Silver Plating, by E. Eklund. je21

### CORNELL'S

**EXCELSIOR GALLERY,**

**650 Washington st. Three doors below  
Kearny.**

Having refitted the above rooms the undersigned is  
now prepared to furnish the public with a superior style  
of Picture, at a lower price than ever before offered in  
the city.

### CARD PICTURES.

As I have every facility for producing these beautiful  
pictures, in all their different varieties, I have reduced  
the price to

**\$3 PER DOZEN and \$2 PER HALF DOZEN!**  
Large size Photographs. \$3.—Extra copies \$1 each.  
**AMEROTYPES** in all Styles and Prices.

**OLD PICTURES** copied with care and accuracy, in any  
style desired, Particular attention paid to pictures of  
Children.

Pictures painted in Oil or Water Colors, and retouched  
in India Ink by a competent artist.

je22 **R. H. CORNELL.**

**BAUNCHEIDTISM,**

**THE PRESERVER AND PRODUCER OF LIFE.**

**THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF**  
curing disease, is a "fait accompli" in medicine,  
and needs no more proof. The public has crowned Baun-  
cheidism already with an extraordinary patronage, and  
it is acknowledged by all men of science that BAUN-  
cheidism is founded on a rational, scientific basis.

It can safely, and with sure success be applied to pa-  
ralysis in consequence of Apoplexy, Podagra and Rheu-  
matism of every description, which kind of complaints  
can find their only relief by the above method.

Especially can it be applied successfully, in the spring  
of the year to diseases of the eye.

Dr. Borchers in San Francisco, and Dr. C. J. Marx in  
Sacramento, are the only doctors in California who have  
the original series of Dr. BAUNCHEIDT and his original  
oil. Dr. Borchers is also in possession of original letters  
of the inventor of the method by which he can prove that  
he is the best method of the latter.

**DR. J. C. BORCHERS.**  
No. 19 Kearney street, and No. 4, Mark's Place. First  
story. No. 5. Office hours from 9 to 11 A. M., and 1 to  
4, and 7 to 9 T. M. je-21

**P. M. S. CO.**

**PACIFIC MAIL STEAMSHIP COMPANY'S**  
line to PANAMA, connecting via the Panama Rail-  
road with the steamers of the Atlantic and Pacific  
Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the  
month of May, 1863.

**July 3d, - - - - - Stermer Golden Age**

**July 13th, - - - - - Steamer St. Louis**

**July 23d, - - - - - Steamer Constitution**

Will leave Folsom Street Wharf, with Passengers and  
Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with  
steamships for New York.

For Freight or passage, apply to

**A. B. FORBES, Agent.**  
je4 Corner of Sacramento and Leidesdorff sts.

## WHEELER'S

**Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the prin-  
ciples and witnessed the operation of these Pans, that  
they are decidedly superior for triturating and amalga-  
mating purposes to any other in use.

The most important principle connected with the op-  
eration of these Pans is the separation of the triturating  
process from that of extracting the amalgam from the  
sand. The chief cause of loss of the precious metals ar-  
ises from the passing off of the same in combination with  
the quicksilver, during the process of triturating, and in  
cleaning up. By the introduction of the Separating Pan  
to flow the triturating this loss is entirely avoided. In  
working these machines there is no appreciable loss of  
quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated  
on the side of others on sands from the same vat, the  
Wheeler Pans have uniformly gained a large percentage  
of metals over its competitors, as well as a still larger  
percentage in the amount of work performed.

\* These Pans have been seen in daily operation, at the  
Miner's Foundry, on First street in this city, where all  
interested are invited to call and examine for themselves.  
2016-H **ZENAS WHEELER.**

**A. ROMAN & Co.,**

WHOLESALE AND RETAIL

**Book Establishment,**

**417 and 419 Montgomery street,  
SAN FRANCISCO.**

Orders respectfully solicited and promptly attended to.  
A Treatise on Metallurgy, Comprising Mining and Gen-  
eral and Particular Metallurgical Operations, Etc.  
Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the  
Chemistry of Metals.

Records of Mining and Metallurgy, or Facts and Mem-  
oranda for the Use of the Mine Agent and Smelter.  
By James Phillips and John Darlington.

Manual of Metallurgy, more particularly of the precious  
metals; but including such others as are employed  
in dental practice.

Pigroot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying; by Philips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Min-  
ers and Smelters.

Practical Assaying, by Michell.

Silver Ores and Silver Mines, by Pro. Blake.

Wheeler's Dictionary of Arts, Manufactures and Mines.

Weissbach's Mechanics of Machinery and Engineering

Neville's Hydraulic Formula Tables.

Fresenius' Chemical Analysis.

**Together with many other works in this  
and similar lines**

Books imported to order on short notice. **A. ROMAN & Co.**

**417 & 419 Montgomery Street.**

**P. M. STEAMSHIP COMPANY.**

### NOTICE.

**Until further notice, the Steamers of**  
Pacific Mail Steamship Company will hereafter be  
dispatched on the

**3d, 13th and 23d of each month.**

When any of the above date fail on Sunday, the steam-  
er will be dispatched on the following Monday.  
**A. B. FORBES, Agent.**

**Wm. P. TAAFFEE,**

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,**

**CARPETS, DUCK, ETC.,**

**Cor. Front and Sacramento streets,**

**SAN FRANCISCO.**

**REYNOLDS'**

**Patent Cut-Off and Governor,**  
**FOR STEAM ENGINES.**

**127 of these Invaluable Machines,**

**ARE NOW IN USE**

In California and Nevada Territory, giving a perfectly  
regular motion and

**Saving 20 to 65 per cent of the Fuel.**

### Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act  
and least liable to get out of order of any Governor in  
use. It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.

### Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chim-  
ney or Valve in the Blast Pipe by the pressure of the  
steam in the boiler. It will regulate the pressure to a  
pound, on the square inch. IT CANNOT get out of order  
and any person can put one up in an hour after the dam-  
per is put in.

### Ingersolls Patent Drill Press,

With which drilling can be done the same as with the  
common ratchet, and when small holes are wanted, it  
can be done four times as fast. The handle can be wor-  
ked in any direction.

### Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.

### Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.

### Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury  
to the iron. In use for the past EIGHT years.

Refer to—Sugar Refinery, San Francisco,  
Cottell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.

**E. T. STEEN AGENT.**

No. 33 Fremont Street, San Francisco.

## MINING & SCIENTIFIC PRESS.

**THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.**

**THIRD YEAR! VOLUME VI.—NEW SERIES!**

A new volume of this extensively circulated paper  
commenced Sept. 11, 1862. It is intended that every  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits,  
together with several original engravings, of new inven-  
tions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietor to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published.

### The Mining Interest!

Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of  
Mining Stocks, new inventions of Machinery adapted to that  
purpose, and of everything generally that may be of ser-  
vice to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having had  
great experience as Patent Agents, together with facili-  
ties at Washington that enable them to obtain Patents  
with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its personal, as its col-  
umns will from time to time contain original engrav-  
ings of new machines and inventions, together with a  
large amount of reading matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.

### To Chemists, Architects and Millwrights.

This journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of infor-  
mation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plau-  
ters will not be neglected, engravings will be given of  
agricultural implements, and the farming interest gen-  
erally will be amply discussed.

### Terms.

To mail subscribers—Four Dollars per annum

**Club Rates.**

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscrip-  
tion is only \$2 80. Names can be sent in at differ-  
ent times and from different Post-offices. Specimen  
copies will be sent gratis to any part of the country.  
**EWER & SMITH, Publishers.**  
Room 27, (formerly U. S. Court Building, Corner of  
Washington and Battery streets, San Francisco.



**DESKS**  
AND  
**Office Furniture,**  
OF ALL KINDS.....FOR SALE BY  
**JOHN WIGMORE,**  
No. 423 CALIFORNIA ST., SAN FRANCISCO.  
OFFICE JOBING, of all kinds, attended to.

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19, First Street, San Francisco,  
Furnish Castings and Machinery of all kinds  
ALSO:  
GENUINE WHITE IRON SHOES AND DIES.  
PALMER, HANSCOMB & CO.  
**To Quartz Miners.**  
Knox's Improved  
AMALGAMATING PAN,  
WITH  
PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST  
complete amalgamation of the precious metals of  
any process now known.  
By it steam is introduced in the most effective and eco-  
nomical manner, while it is peculiarly adapted to the  
catching floating gold and silver, known to be other-  
wise lost. Made exclusively by  
PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

**T. C. Sanborn & Co.**  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**  
GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

**DEETKEN'S**  
**Chemical and Metallurgical Works,**  
On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REAS-  
ONABLE RATES.** All the Gold extracted by Chemi-  
cal process. Yield of Sulphurets from 30 to 60 per cent  
higher than the BEST AMALGAMATION PROCESS.  
Apparatus for separating Sulphurets set up by ex-  
perienced hands at a cost of \$50 to \$100, if desired by  
mill owners. No power nor clean water required for  
the purpose. nov-83m

**LEWIS COFFEY AND RISDON,**  
**STEAM BOILER AND SHEET IRON  
WORKS.**

The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.  
Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
LEWIS COFFEY J. N. RISDON.

**FREDOR KALLENBERG**  
**Maker of Models**  
FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophi-  
cal Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to.**  
No. 4 Sansome street, corner Market,  
n7.3m) San Francisco.

**International Hotel,**  
JACKSON STREET, ----- SAN FRANCISCO  
[A few doors above Montgomery.]  
**FIRE-PROOF BRICK BUILDING.**

Most convenient to the  
Steamer's Landing, Businessmen's & Places of Amusement

**OPEN ALL NIGHT.**  
City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Five Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FUR-  
nished this spring. Every Room opens to the Light  
and Air. Each room is furnished with a first quality  
Patent spring Bed and Hair mattresses. The International  
offers to guests the greatest number and**

**BEST FURNISHED FAMILY ROOMS;**  
and SEVEN AN GOOD A TABLE as any House in the City.  
I am determined that the INTERNATIONAL shall be the  
most comfortable, best regulated, and in all respects su-  
perior to any like establishment in the state, and shall  
aim to merit a continuance of the popular favor it has  
enjoyed heretofore. It will be conducted on Temperance  
Principles.  
F. E. WEYGANT, PROPRIETOR.

**Tremont House,**  
418 and 420 ----- Jackson Street,  
[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY  
advantages to the traveler for convenience. It is  
only half a block from the Post Office and Custom House,  
and about the same distance from the principal places of  
Amusement.**

**The City Railroad Cars pass the Door.**

The House is conducted on Temperance Principles,  
**WHICH SECURES TO OUR GUESTS QUIET.**

The prices for board and Rooms are very moderate—  
by the day, meal or week. WE SOLICIT A CALL FROM ALL.  
F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have ta-  
ken and refurnished the INTERNATIONAL Hotel, and will  
carry on the two houses in connection, so that Travelers  
wishing to put up at either house, may take the Tremont,  
or International Hotel Coach and be taken to either House  
with their baggage, FREE.  
F. E. WEYGANT.

**Volcanic Smelting Furnace.**

**PERSONS DESIRING INFORMATION AS TO THE USE  
and economical properties of this Furnace, and in-  
cluding to make use of the same, when satisfied of its  
superiority over all other means of reducing ores and  
separating metals from the sulphurets, can obtain all  
needed explanation and advice in regard to the same, and  
the terms of sale of rights to use the same, on application  
Col. J. D. Stevenson or T. Ogg Shaw, or by letter to the  
proprietors through the Post Office at San Francisco.  
Drawings may be seen at the office of Col. J. D. Stevenson,  
No. 614 Merchant street, or at the office of T. Ogg Shaw,  
in Brannan's Building, Montgomery street.**

The time required for reducing ores by this Furnace  
is from three to eight hours, and the amount of fuel only  
one-tenth as much as is consumed by other processes.

The process of condensation is applied to this Furnace  
which will save all those portions of precious metals  
which usually escape in a volatile form.  
The attention of all interested in the subject is requested  
to examine the important results obtained by this pro-  
cess.

Parties wishing will be allowed to erect a trial Fur-  
nace of capacity for smelting one ton of ore or more, on  
signing an obligation to pay the usual fee for the right to  
use it, should they continue to make use of the invention  
or a longer period than two months.  
mch 16 MRS. E. J. HALL, M.D., Proprietress.

**LEANDER RANSOM,**  
**Civil Engineer**  
AND  
**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

ALSO  
**STATE LOCATING AGENT.**

And as such having the sale of  
600,000 ACRES OF STATE SCHOOL  
LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. cor-  
ner of Montgomery and California streets. oct-73m

**The Occidental Hotel**  
IS NOW  
**Open for the Reception of Guests.**

**THIS HOUSE HAS ALL THE MODERN IMPROVE-  
ments, and will be conducted equal in every re-  
spect to the first class houses of the Atlantic cities.**  
The spacious READING AND EXCHANGE ROOMS, have  
been fitted up with special reference to the comfort and  
convenience of the public generally, having a

**News Stand,**  
AND A LARGE  
**CABINET FOR MINERALS;**  
ALSO

**A Branch Telegraph Office,**  
Connecting with all the lines throughout the country.  
LEWIS LELAND & CO.,  
Proprietors.  
San Francisco, Jan. 1st, 1863.

**John R. Sims,**  
  
Oregon street, between Washington and Davis and Fro  
and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and  
Shutters, Bank Vaults, Grating, Cemetery Rail-  
ings. All orders from the interior Oregon, Washington  
Territory, Vancouver's Island, British Columbia, or any  
place on the Pacific coast, attended to with promptness  
and dispatch.**

**Mr. Sims Appreciates the Past**  
liberal patronage of his friends, and trusts that he may  
continue to merit it in the future.

**For the Information of Strangers**  
he would say that he feels confident that his experi-  
ence in his particular calling is surpassed by none on  
this coast, which his superior work, sent to almost ev-  
ery town in this state, Oregon, also Victoria and the Sand-  
wich Islands, and to be seen on some of the best build-  
ings in San Francisco, fully attest. A large assortment  
of second hand shutters for sale at low rates. ap13

**NATHANIEL GRAY,**  
**General Furnishing Undertaker,**  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

**FULTON FOUNDRY & IRON WORKS**

**HINCKLEY & CO.,**  
MANUFACTURERS OF  
**Steam Engines,**  
QUARTZ, FLOUR AND SAW MILLS; CAST IRON  
FRONTS, FOR BUILDINGS, MINING PUMPS,  
AND ALL KINDS OF MACHINERY, ETC.,  
FIRST STREET,  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* \* All kinds of IRON AND BRASS CASTINGS furnished  
at short notice. Every style of FINISHING to Iron when  
cast. Repairing of Machinery neatly done.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**W. T. & J. GARRATT,**  
**City Brass and Bell Founders**  
Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE  
and Lift Pumps, Church and Steamboat Bells, Tav-  
ern and Hand Bells and Gongs, Hoses and all other joints,  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PIPES AND NOZZLES for MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.;  
COUPLING JOINTS OF ALL SIZES. Manufacturers of "Gar-  
ratt's Patent Improved Journal Metal."**

**SQUARZA'S PUNCH.**  
FIRST PREMIUM  
AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.

ALSO; FIRST PREMIUM  
At the San Francisco Bay District Agricultural Fair, 1862  
MANUFACTORY, WHOLESALE AND RETAIL,  
No. 44 Leidsdorff street,  
Opposite the What Cheer House, San Francisco.

**To Mine Owners.**  
**PARTIES having a Good silver Mine**  
and wishing for  
Machinery to work it for an interest in the Mine  
Will do well to apply at this office. No organized com-  
pany need apply.

**50 lbs. MARINE and  
Fire-Proof Paint,**  
MANUFACTURED BY THE PACIFIC METALLURGICAL  
Works in this city, for Hulls and Decks of Vessels,  
from ground Mineral Rock contains Arsenic, Copper, Li-  
tharge and six other Minerals. When used on the Decks  
or Bottoms of Ships, it is equal to a coat of Stone, and  
quite equal to Copper, no worms will ever effect it, and  
cheaper than any other paint.

**DIRECTIONS:**  
For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur  
three parts Mineral Paint, mix with Coal Tar and apply  
it hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes  
of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**  
When used on Roofs, Buildings, or Fences, it is equal  
to covering them with a coat of Stone, being perfectly  
Fire Proof, and costing less than any paint.

**DIRECTIONS:**  
HOUSE.—Mix three parts Mineral Paint with one part  
white lead, thin with Linseed oil: if a lighter color is  
wanted, mix less paint, more lead.  
ROOF.—Five parts of Mineral Paint, one part white  
Lead; mix with Linseed oil. Put it thick on a tin Roo  
as one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
G. T. FOUQUE, Superintendent.

**WORKS, North Beach; Office, 509 Sac-  
ramento st., San Francisco.**

**WRIGHT'S PICKS.**  
JOHN WRIGHT, of Sacramento, has established him-  
self in San Francisco for the manufacture of every  
description of PICKS, of the best material, at reduced  
prices. PICK EYES of the best iron furnished in any quan-  
tity, at low rates. Orders from the country promptly  
attended to. N. B.—None genuine unless stamped with  
my name. JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.

**REMOVAL.**  
**OFFICE OF THE PACIFIC METAL-  
lurgical Office is removed to 509 Sacramento street**  
Having enlarged our Works at North Beach, we are  
now enabled to reduce from 10 to 15 tons of Silver or  
Gold rock per day.  
Gold and Silver ore, and Sulphuret Assayers', or Sil-  
ver smelters' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in  
cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

**WANTED,**  
**GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,**  
BY FRONTIER A. DEVIERCY,  
13 ap 487 Pine street, San Francisco.

**FREDERICK MANSELL,**  
**MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,**  
No. 422 California street, corner of Leidsdorff.

Drawings of MODELS made for parties applying for pa-  
ents at Washington or London. mar 23 2m

**HAYNES & LAWTON,**  
IMPORTERS AND DEALERS IN

**CROCKERY,**  
GLASS WARE,  
**FRENCH CHINA,**  
Coal Oil Lamps, Table Cutlery,  
**CLOCKS,**  
Silver Plated and Britannia Ware,  
ETC., ETC., ETC.  
NO. 516 SANSOME STREET,  
[CORNER OF MERCHANT.]  
SAN FRANCISCO.



## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been wasted upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the last twelve years, has been set down as a failure. The Ordinary Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

### METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the severest of all test—that of constant use—and in every case has been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now pretty extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1860, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps,

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes with four and five Stamps, etc. The Four Stamp Battery weighs, when complete, about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed, when desired, is cast in sections, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hewes, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

MANUFACTURED ONLY BY  
**GODDARD & CO.,**

At the Pacific Iron Works,

SAN FRANCISCO.

on 125 to 136 First street, and 126 to 144

Fremont street.

To Prospectors and Mine Owners.

**J. H. CHURCHILL,**  
Assayer & Chemist,

SAN FRANCISCO.

**E. C. DAKE,**  
DEALER IN  
**CLOTHING,**  
AND  
Gentlemen's Furnishing Goods;

ALSO  
HATS, CAPS, ETC.

At THE NEW YORK CLOTHING STORE,  
541 & 543 Washington st. Montg'my Bk  
je] Old No. 145. [29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY

**PEASE, BOWLEY & CO.,**  
Real Estate, Stock and Exchange  
**BROKERS,**

621 Montgomery street, San Francisco.

LEGAL TENDER NOTES AND MINING STOCKS,  
BOUGHT & SOLD.  
je-29

## PUMPS!

HARRISON'S

California Lift and Force Pump,

WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

### ALL SIZES;

Capable of throwing from ONE HUNDRED to FIVE THOUSAND Gallons per Minute—For sale by

C. H. HARRISON,

PHOENIX OIL WORKS,

je-15 517 Front Street, San Francisco.



**DR. H. AUSTIN,**  
DENTIST.

No. 624 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices.  
je-29

**L. F. LELAND,**  
**STOCK BROKER,**

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

**New Bedford Copper Company.**

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

MORGAN, STONE & CO  
je-29 108 Front Street, San Francisco.

**Napoleon Copper Mining Company.**

Capital Stock.....\$1,620,000.  
2,700 Shares—\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACCRELLISH  
Secretary.....Q. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....RICHARD FOWNING

### TRUSTEES.

F. MACCRELLISH, of Alta California.  
M. ERLÉNBAUGH, of Greunberg Erienbach & Co.  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je-29

**San Antonio Gold and Silver Mines,**  
LOWER CALIFORNIA,

**FORWARDING & MINING AGENCY.**  
SAMUEL SMITH,

OFFICE—North West Corner of Front and Clay Streets, San Francisco.

MINING MACHINERY AND MERCHANDISE FORWARDED, Mining Claims secured, through the resident Agent at San Antonio, and information furnished regarding any claim, in that Territory, on Commission.  
je-26

### PEOPLE'S

**Steamship Line!**  
Connecting California and New York  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**  
J. H. BLETHEN.....COMMANDER

Will be dispatched for

SAN JUAN DEL SUR,  
From Mission street Wharf.

THURSDAY, - - - - JULY 23, 1863.  
Punctually at 9 o'clock, A. M., on Connecting at GREYTOWN with the Splendid Steamship  
**AMERICA** - - - - - 2500 Tons.

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route. These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers

For further information apply to  
I. K. ROBERTS, Agent,

## FOR SALE.

PATENT PRESSED RUSSIA IRON MINING PANS.

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

**UNEQUALLED  
MONITOR COOKING STOVE  
OR RANGE,**

FOR HOTELS.

To which we call particular attention.

je-29 TAY, BROOKS & BACKUS.

**The Pacific Mineral Company**

MAKE LIBERAL ADVANCES UPON THE ORES OF COPPER, SILVER, TIN, NICKEL, COBALT, ZINC, LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-14 Montgomery Street, San Francisco.

**A. C. MORSE,**  
Mining and Real Estate Agent,

Office—S. W. corner Pine and Silver sts., Aurora.

HAVING MADE ARRANGEMENTS with MINER S. MARTIN Esq., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL, every description of Mining Stocks in Esmeralda District

**MYERS & DAGGETT'S**  
Mining and Stock Exchange,  
No. 23½ B Street, Virginia City, N. T.

Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* Abstracts of Titles Furnished, Etc.

**MARTIN & Co.,**

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

**Purchase of Copper Ores,**

Assaying 8 per cent and upwards of Copper to the Ton. We will make ADVANCES upon Ores of COPPER, TIN and NICKEL. Sacks will be furnished and Freights Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York. San Francisco.  
San Francisco Post Office, Box 1259.  
je 1.

**New Patent Agency.**

WE HAVE CONNECTED WITH THE Publication of the "MINING AND SCIENTIFIC PRESS"

**The Patent Agency Business,**

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency**

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office,) San Francisco. EWER & SMITH.

**FOREIGN PATENTS OBTAINED**

By application at this office, Room 27, Federal Building. EWER & SMITH, Solicitors.

**NOTICE TO INVENTORS.**

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate. EWER & SMITH.

**PATENT RIGHTS.**

Patent Rights Bought and Sold, At the office of the "Mining and Scientific Press" Agency EWER & SMITH.

**IMPORTANT TO INVENTORS.**

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

**To Mining Companies.**

FOR SALE—A STEAM ENGINE AND BOILER. The Engine is 30 horse power—10 inch cylinder—24 inch stroke—solid iron frame, with heater, pumps, etc., all complete. The boiler has 5 flues, is 24 feet long, 40 inches in diameter, made up from the best three-eighths inch Low Moor Iron, and weighs about 5000 pounds. Both Engine and Boiler are in perfect order and fully guaranteed. Apply to  
I. H. HAM, No. 211 Clay st.  
San Francisco, June 13, 1863. 3t

Office of the Nevada Copper Mining Co. March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees, J. ARMSTRONG, Secretary.



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

LEWIS & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, JULY 6. 1863.

NO. 36.

## CENTRIFUGAL QUARTZ CRUSHER.

The annexed cut represents the quartz crusher, of which we have frequently spoken, as in use at Pike's Peak, where it appears to be known as the "Young America Quartz Crusher." In the proprietor's Circular from which we gather the following description, it is called "The Centrifugal Quartz Crusher." It is employed at Pike's Peak in connection with Keith's Desulphurizing Process, for which it is peculiarly adapted.

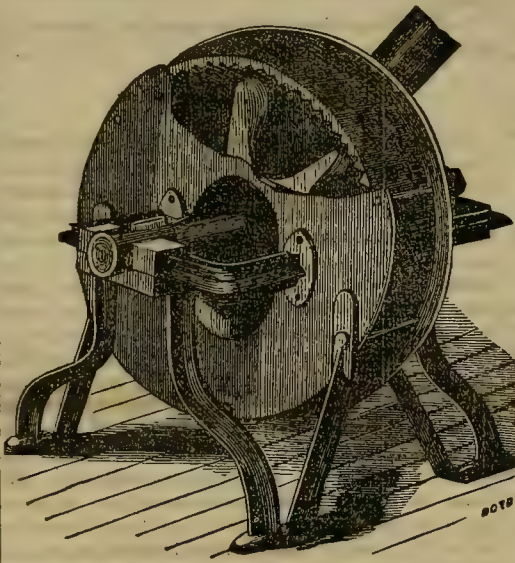
It is claimed that this mill is capable of crushing a larger amount of material, with a less expenditure of power, than any other mill in use. It is said to be as well adapted to the grinding of all kinds of grain, as it is to the reduction of quartz rock. The engraving fully represents all the parts, a portion of the left side being broken away to exhibit the inside structure. The shell is three feet in diameter, and five inches wide; a steel shaft passes through the centre, armed with six fans or arms, reaching nearly to the periphery or rim, which is corrugated on its inner side. The material to be crushed is thrown in alongside the shaft and has its exit on the opposite side, through the pipe there presented. Each piece of ore or other material, as received, is stricken by the arms, and rendered dust fine, in which condition it is thrown out at the tube on the opposite side by their action as a centrifugal blower. The fineness of the product, and the efficiency of the mill, depend entirely upon the velocity with which it is moved, and the position of the pipe for the exit of the ground material. At low velocity it is an excellent rice and coffee huller, and at high velocities the hardest gold quartz can be ground to an impalpable powder.

## ANALYSIS OF THE ACTION OF THE CENTRIFUGAL QUARTZ CRUSHER.

For a clear understanding of the action of this instrument, it will be necessary to analyse some of the natural laws which are brought into requisition during its use. The difference between absolute momentum and continued force, is well understood; but when the momentum is carried up to unusual speeds, it is claimed that new actions and functions are developed, which are not to be found in the trip hammer or other usual methods of exercising momentum. Suppose a piece of gold quartz to be thrown into the atmosphere, and during its descent be stricken by a sledge hammer, traveling at the rate of twenty thousand feet per minute; it is claimed that the action will not be merely to break the gold quartz into fragments, but to surmount the cohesive power of the mass, and thus, for an instant, of time, to do away with that property, rendering the mass representing smoke of finest possible division of matter. And this claim we think can be rendered understandable by a clear illustration of what constitutes cohesion, and also by a development of a new function, which may be thus expressed.

A body in motion, is said, in common mechanical parlance, to have a power, as a projectile, equal to its weight multiplied by its velocity." It may be said, with equal truth, that the hardness of a body in motion is equal to its hardness multiplied by its velocity. Thus, it is well known, that a

## Howell's Patent Centrifugal Quartz Crusher.



tallow candle may be thrown from a gun through an inch plank, while it is well known that a candle is much softer than a board. It is also well known, that a disc of soft iron rapidly revolved, will cut into a bar of steel; indeed, any substance, which from its surroundings and peculiar configuration, can be passed with great velocity, is increased in relative hardness. Let us admit, then, that with the Centrifugal Quartz Crusher the moving arms may be made to reach the velocity claimed as necessary to surmount cohesion. If we examine cohesion as a property in matter varying in different substances, and suppose it to arise from the attraction of particles for each other, rather than from a hooklike form of particles interlacing each other, we shall find no difficulty in comprehending the immense force necessary to sever it. Thus, a cubic inch of steel, or an inch square of steel, would be more proper in this case, exercises tension at the rate of 90,000 lbs. when applied as continued force, and not as a momentum. If we recollect the rule that attraction is inversely as the squares of the distances, and then admitting that with an ordinary magnet, the attraction exercised upon the keep, at the distance of one inch, is 1 lb, then at half an inch it will be 4 lbs, at a quarter of an inch 16 lbs, at an eighth of an inch 64 lbs, at the sixteenth of an inch 256 lbs, at the thirty-second of an inch the square inverse of that number, and so on at the same ratio, until at the point which is supposed to be actually in contact, it is no longer curious that the inch area should sustain 90,000 lbs, but rather that any amount of force which could be practically applied would draw it asunder, and were it not for that film of resistance described by Newton, it could not be separated.

When a surface is attacked by absolute momentum, this film of resistance may be perceived; and although in ordi-

nary use two billiard balls do not really touch each other and therefore the polish is not destroyed and the balls are not split, still with an increased amount of momentum both these effects will occur. As an illustration, suppose a polished anvil have placed upon it a piece of gold leaf, and you should put upon this any amount of continued force, it would not cause any amalgamation, or other connection between the gold and the anvil, and after removing the impinging matter the gold leaf might be blown off; but if the gold leaf be stricken by a polished hammer, so as to develop momentum at the point of contact, that point will be found to be permanently gilt, and if we scrape off the surface to three times the thickness of the gold leaf, we shall find gold imbuing the metal. This is a well known fact, and fairly illustrates that by absolute momentum the film of resistance may be pierced, and certain metals may be forced into each other.

Now in the use of the arms of this machine, we would claim that absolute momentum, and not continued force, is the form in which all power is developed at the speed proposed by the inventor. This momentum is sufficient, not only to do away with the film of resistance at the point of contact, but to surprise the cohesion of particles, so that instead of breaking the mass into many pieces, it absolutely divides it into its ultimate particles: and there is a speed at which chalcedony and gold quartz may be crushed by this machine, so that the powder resulting is so fine, that when rubbed between the fingers it is soft like velvet, exhibiting no grit or other proof of crystalline or other continuous structure; nor will the machine itself be abraded during their action, for so great is the speed of the arms giving the momentum, that their hardness, as before explained, is increased in the same ratio. Even the surface of these cuttings will not be abraded, while the substances they are impinged upon will be delivered from the machine in this finely divided condition.

All former methods of crushing gold quartz have failed in exhibiting all the gold, from the absence of an entire division, mechanically, of the particles. This may be understood: a piece of pure gold drawn across the surface of a hone leaves a yellow mark, and in many kinds of gold ores this graphitic-like mark is to be found percolating the mass, and when divided by washing, despite all methods yet pursued, it passes off with the water. Indeed, this finely divided gold will float a month on the surface of water, without becoming wet on the upper side of the particle, or in other words, without sinking, and it is therefore lost. Many specimens of gold quartz contain a much larger amount of gold than can be separated from them after what is usually called thorough grinding, by washing, and the same defects from the same reasons, occur during the attempted amalgamation. When the quartz, however, is crushed by this machine, at its greatest velocity of action, every graphitic indication of gold is caused to appear upon the surface of particles, and therefore it may be removed by ordinary amalgamation. We have seen ores crushed with this machine, which would yield a larger percentage of gold beyond the amount obtained by the usual methods, than the amount so obtained.



NOTES OF A TRIP TO SLATE RANGE *via* LOS ANGELOS AND EL PASO.—No. 4.

APRIL 25th. The El Paso range of mountains, for which the District is named, is a spur from the southern termination of the Sierra Nevadas, running north easterly about 25 miles from Red Rock Cañon, near Cane Springs, through which the road leads off to Owens Lake country, Coso, Mono and Esmeralda mining Districts. Another spur of burnt mountains commencing at the same Cañon, runs north-westerly to Walker's Pass, about 35 miles. The El Paso Range seems to contain rich metals, throughout its whole length, except at a point about 3 miles north of Mesquit Springs, where the hills appear to be entirely burned to ashes. Some gold has been found in these hills, but no defined ledges.

## THE MINERALS AND MINERAL VEINS.

The minerals found here are silver, copper, galena, and some gold; of which the Tucker Lode, on Gold Hill presents, thus far, the best indications, which are bright pieces of native metal seen all through the rock. The range seems to terminate in a mountain called Laurel Hill, which contains more rich lodes than any other in the District. The Manzannilla, Milliken, Laurel No. 1 and 2, and Ophir Lodes are located there. Thus far but very little work has been done in the District; no working men have come in. All are prospectors and locators. Many of the lodes show very rich croppings, and soon they will be further developed by sinking shafts, and tunnels, to find their condition 25 to 50 feet below the surface.

The lodes now located are generally boldly defined, some of them rising 5 to 8 feet above the surface, showing a continuous line of mineral for a long distance.

## ORE en route FOR SAN FRANCISCO.

A train of 30 pack-mules passed, from Slate Range, to-day, loaded with Antrim rock bound for San Francisco for reduction. The teamsters all say that this point may be considered the half-way station from Los Angeles to Slate Range, as from this Spring no feed or water can be found, together, to keep up the condition of the cattle. Teamsters offer to contract for freight to this place at one half the rate to Slate Range, although the distance from here to Slate Range, is only 50 miles; while to Los Angeles it is nearly 150 miles.

APRIL 28th. There is no difficulty in finding leads here, as they crop out on every hill and gulch. We shall locate some of them, and as soon as our tools arrive, develop them, to determine whether they will pay to work and ship to the city, at a cost of about \$125 per ton.

## A THUNDER STORM.

MAY 1st. A heavy thunder storm, with little rain, passed along the summit of the mountains, following the hill around to the East and then South Easterly on a spur into the desert about 40 miles. It was very interesting to one who had not heard the sound for more than 13 years.

MAY 4th. To-day we associated with a couple of prospectors, who have a pack-mule, and one of our party left with them for a week's trip to prospect Laurel Hill, from which some specimens of great value have come into camp.

## THE ILL FATED ADA HANCOCK.

Report came in to-day of the terrible accident occurring to the steamer Ada Hancock, on the 27th ult. This strikes home to our community with great force as we were intimately acquainted with most of those killed and some of them are associated in this mining enterprise, and were here only a few days since in full health.

MAY 5th. Made out and posted notices of a meeting of miners, for the 8th of June, to alter and amend the District Laws.

A party of 20 or more soldiers have arrived at Can Springs as escort to a train conveying Government stores to Owens Lake Country. They remain at the Springs till a former train returns to that point under guard and then return the way they came.

## PROSPECTORS AND LABORERS ARRIVING.

Our Recorder, J. Narboe, and others who left under the Indian excitement, have returned and are intending to progress vigorously with the work of developing the claims.

11th. Two Cornish miners came in to-day with a Visalia party. Messrs Turner, Cobb and Rheinstine, to open claims and test their value. Good for us!

Messrs. P. Banning of New San Pedro and M. Keller of Los Angeles, have sent out a working party of about 20 greasers and four or five white men, to work 15 or 20 claims, held by the original discoverers of this District, Messrs. Milliken, Narboe and Warner. Most of these claims are in Montville Cañon, Copper Hill and Basin Silver Hill and Gold Hill: They reserve their Laurel Hill leads for the present, I am told. Our population is now about fifty, including greasers.

15th. The greasers are leaving, as the work is very hard and the pay small—about \$25 per month and found. The climbing up to their work in the morning is what wears them out, as the camp must be located at the base where the water is found.

17th. Messrs. Keller & Co. are here again to look over the District and decide in regard to sending out more help.

WEDNESDAY, MAY 20th. For nearly three weeks, I have been almost alone, acting as camp keeper for three camps, close by, while all hands are busy among the rich lodes of Laurel Hill, 15 miles away.

I will send forward by first opportunity this fourth paper, and then others as occasion offers.

Report has come in of Mr. Whitmore and six horses missing from Indian wells ranch, supposed to have been taken by Indians. Two horses were shot and left on the ground.

I will make up a list of what is wanted for a prospecting trip like this, in my next letter. C. W. T.

## SUB MARINE EXPLORATIONS.

It is only within a few centuries that the inventive genius of man has been enabled to so far cope with the ordinary laws of Nature, as to remain for any length of time beneath the surface of the water. Curiosity at first prompted to such attempts, and subsequently the wants of man became powerful incentives to efforts in this direction. The limited powers of endurance on the part of the simple diver, soon called into action the inventive ingenuity of man to supply mechanical aids for such hazardous and laborious undertakings. Inverted wooden tubs, cumbrous with pendant weights and overhanging tackle, gradually gave way to metallic hemispheres, with various contrivances for supplying fresh air. Dr. Halley and Mr. Phipps, in the latter part of the 16th century, made various important improvements to the "Diving Bell," which greatly increased its practicability. The Doctor invented a very useful contrivance by which he was enabled to go out and move around upon *terra firma* at the bottom of the water. This last invention doubtless suggested the "Submarine Armor" which has been so popular for the past twenty years, and which has actually accomplished much in bringing to the surface sunken treasure, etc., and in conducting various other submarine operations.

Important as were the results achieved by these appliances in the hands of daring men, from the time of their earliest introduction up to near the close of the last decade, it was still acknowledged that much remained to be done to bring the diving bell to anything like a reasonable standard of excellence. The chief obstacles in the way of their advantageous application was the cumbersome machinery unavoidably attached to them, for forcing air, etc., and the necessity of sustaining them by derricks or cranes. The former objection was a most serious one and extremely hazardous, as the lives of the divers often depended upon very slender and uncertain appliances; while the necessity of being sustained by cranes rendered their employment upon floating supports almost useless from their constant up and down motion, where the water is agitated by any considerable wave or swell. The great danger to life, and terrible effect upon the system, attendant upon the employment of the submarine armor is well known to all conversant with submarine operations. The simple statement of the fact that in the use of the "armor" at a depth of 100 feet, every plunge of the air pump is equivalent to a blow nearly equal to four pounds upon each square inch of the body of the operator, is sufficient evidence of the endurance required in its use. No organization can successfully resist the exhausting effects of such terrible and continuous shocks for any considerable length of time.

The Diving Bell and Submarine Armor, have had their day. They have been weighed in the balance and found wanting, and the world is now indebted to an American In-

ventor for what appears to be the perfection of mechanic appliances to submarine operations, whether for descending to the bottom, remaining there at will, then ascending to the surface; or moving along beneath the surface, at a greater or less depth as may be desired.

The invention to which we now refer was patented by Professor RYERSON, of New York, about three years since, and was first successfully employed in removing the obstructions near Hurl Gate, in New York Harbor. It was then pronounced by the New York papers as the *ne plus ultra* in the way of a diving apparatus, and that opinion has never been qualified since.

We have now before us a sketch of this ingenious piece of mechanism with a description of its parts from which to condense:—

It is formed of two very substantial wrought-iron cylinders one of which is contained within the other. The space between them forms a compressed air chamber.

The inner cylinder is divided into two compartments, which can be completely separated from each other by closing the intervening man-hole whenever separation is necessary. Communications are maintained between these compartments and the compressed air-chamber by valves, or stop-cocks. At the base of the machine there is another compartment completely surrounding it called the ballast-chamber. It communicates both with the compressed air-chamber and the external water, by means of pipes and stop-cocks.

Into this ballast-chamber water or air may be admitted at pleasure by the workmen within the Bell, and the machine can ascend or descend; and the equilibrium is so nicely adjusted that it is absolutely impossible to upset the machine when it may rest only on one point of a rock. The air condensed into the compressed air-chamber at first, by ordinary force-pump, to the extent required previous to descent. The machine is now perfectly buoyant, but by ingenious arrangement, after the hatch is secured, water admitted into the ballast-chamber; the machine then sinks and after it has reached the bottom it remains ready for proposed work. This machine having reached the bottom to be explored or acted on, the man-hole between the two compartments is opened, and the workmen begin their operations in the lower working chamber, and can continue them without interruption, even for days, either in laying foundations of breakwaters, sea-walls, piers, in raising sunken vessels, treasure or anything valuable in them, in diving for pearls, and sponge. It has been suggested by experienced persons that this Bell is preeminently fitted for the exploration of the bottom of auriferous rivers in every part of the world. In short, this machine is applicable to every branch of submarine exploration. The light is partially admitted through bulls-eyes. Candles are required, and the combustion of these, together with the respiration and transpiration of the confined workmen, in due time vitiate the air contained in the chambers. To remove this air without external appliances was the great problem to be solved, and Mr. Ryerson triumphantly done so. By a very simple expedient the air is restored to perfect purity in a few minutes, not as in the previous machines by driving fresh air from above, but by driving (by means of a small forcing pump within the machine) through a very minutely drilled resette, resembling that of a common watering-pot, water from without, in the form of very fine spray or mist for some minutes.

By this simple and easy process, the carbonic acid and other noxious gases, formed by combustion &c., disappear. The previously vitiated air recovers its oxygen, and is found (as determined by a very careful analysis, given in another column,) to hold an excess of five per cent. more oxygen than that contained in the ordinary atmosphere. Thus Ryerson's machine can ascend and descend, always maintaining an equilibrium, purify its vitiated air without external connection or assistance, and is thus placed at the head of all submarine explorers.

POISON ANTIDOTE—SWEET OIL.—Says a farmer: "I have now over twenty years since I learned that sweet oil would cure the bite of a rattlesnake, not knowing that it would cure any other poison. Practice, observation and experience have taught me that it will cure poison of any kind, both in man and beast. I think no farmer should be without a bottle of it in the house. The patient must take a spoonful internally, and bathe the wound for a cure. To cure a horse it requires eight times as much as for a man. Here let me tell of one of the most extreme cases of snake-bite in this neighborhood, eleven years ago this summer, where the case had been over thirty days' standing, and the patient had been given up by his physicians. I heard of it, carried the oil, gave him one spoonful, and a cure was created. It is an antidote for arsenic and strychnine. It will cure bloat in cattle caused by eating too freely of fish clover; it will cure sting of bees, spiders, or other insects; and it will also cure persons who have been poisoned by ivy vine."



LIST OF MINING COMPANIES HAVING OFFICES IN SAN FRANCISCO.

## DIVIDEND PAYING MIN

Name of Company	Locality of Mine	Secretary.	Locality of Office
.....	Virginia District.	Thos J. Lumb...	Rm 1, Express bldg
IDA CUNY GAS	Virginia District.	Wadsworth...	Lucas & Turner bldg
TRAIL..... G & S	Golf Hill, N. Tor	C. T. Hopkins...	406 Front street.
NEY..... G & S	Devil's Gate Distr	A. de Semillac	Government House

## PROGRESSIVE MINES

EMERSON, G. & S.	Virginia District.	James Clements	626 Washington st.
HUNT, EAST & S.	Slate Range District.	J. H. Clarke	628 Montgomery st.
AMERICAN LUMBER	Esmeralda District.	H. Buckingham	907 Clay street.
AMERICAN PIONEER	La Paz, New Mex.	G. W. Blakely	224 Montgomery st.
AMERICAN, G. & S.	Slate Range District.	W. H. Martin	617 1/2 clay street.
AMERICAN, EAST & S.	Slate Range.	W. H. Clarke	224 Montgomery st.
AMERICAN, G. & S.	Slate Range.	W. H. Clarke	224 Montgomery st.
AMERICA COAL M. CO.	Alameda County.	L. Fraunce	Lucas & Turner bldg.
AMERICA S. M. CO.	Del Norte District.	J. A. Rayson	Athenium Building.
AMERICAN, G. & S.	Devil's Gate Distr.	J. F. Pope	116 California st.
AMERICAN, G. & S.	Esmeralda District.	S. Pattee	622 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	Wm Winchester	Aurora, Mono Co.
AMERICAN, G. & S.	Devil's Gate Distr.	O. Strauch	418 Sansome st.
AMERICAN, G. & S.	Humboldt District.	J. H. Gager	Merchant st, nut blk.
AMERICAN, G. & S.	Slate Range District.	S. H. Cooney	7 & 8 1/2 "House"
AMERICAN, G. & S.	Virginia District.	R. L. Taylor	612 Washington st.
AMERICAN, G. & S.	Esmeralda District.	T. L. Bibbins	305 Montgomery st.
AMERICAN, G. & S.	Humboldt District.	A. L. Chemberlin	413 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	E. Daniels	Cashier Custom.
AMERICAN, G. & S.	Esmeralda dist. N. T.	Wm V. Garvey	622 Merchant st.
DEL MONTE, G. & S.	Del Norte District.	Geo. W. Hedges	726 Montgomery st.
AMERICAN, G. & S.	Del Norte District.	W. Tompkins	617 Clay street.
AMERICAN, G. & S.	Slate Range District.	W. H. Martin	617 Clay street.
AMERICAN, G. & S.	Slate Range Distr.	E. Barry	606 Sacramento st.
AMERICAN, G. & S.	Slate Range.	G. J. Turner	600 Montgomery st.
AMERICAN, G. & S.	Am'on dis. Humb.	J. S. Luty	365 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	John W. Gould	404 Montgomery st.
AMERICAN, G. & S.	Bole (Esmeralda)	A. L. Chamberlin	413 Montgomery st.
AMERICAN, G. & S.	Gold Hill District.	P. B. Cornwall	906 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	R. N. Van Brunt	706 Montgomery st.
AMERICAN, G. & S.	Virginia District.	E. C. Lovell	434 Jackson street
AMERICAN, G. & S.	Lower California.	S. S. Sprague	Cor Cal & Sausage
AMERICAN, G. & S.	Virginia District.	J. P. Nourse	Lucas & Turner bldg.
AMERICAN, G. & S.	Silver City.	F. S. Carter	415 Sansome st.
AMERICAN, G. & S.	Van Horn District.	David Wilder	622 Montgomery st.
AMERICAN, G. & S.	Tuolumne County.	John W. Gould	404 Montgomery st.
AMERICAN, G. & S.	White & Eagleland	J. Woodthorpe	326 Clay street.
AMERICAN, G. & S.	Slate Range District.	W. Hersfield	642 Clay street.
AMERICAN, G. & S.	Soledad District.	W. W. Lawton	400 Montgomery st.
AMERICAN, G. & S.	La Paz, Mexico.	E. Barry	606 Sacramento st.
AMERICAN, G. & S.	Gold Hill District.	R. E. Raymond	618 Front street.
AMERICAN, G. & S.	Virginia District.	W. B. Agard	412 Front street.
AMERICAN, G. & S.	Virginia District.	H. C. Toomey	Cor Mont & Cal.
AMERICAN, G. & S.	P. R. dis. Humbolt	Wm L. Duncan	Pioneer Building.
AMERICAN, G. & S.	Coso District.	M. G. Elmore	518 Montgomery st.
AMERICAN, G. & S.	Sinaloa, Mexico.	E. W. Chambers	11 Court block.
AMERICAN, G. & S.	Sinaloa, Mexico.	Jno Armstrong	610 Merchant st.
AMERICAN, G. & S.	Slate Range.	G. J. Turner	600 California st.
AMERICAN, G. & S.	Humboldt District.	G. J. Turner	606 Montgomery st.
AMERICAN, G. & S.	Mariposa county.	V. B. Post	Lucas & Turner bldg.
AMERICAN, G. & S.	Esmeralda District.	John W. Gould	404 Montgomery st.
AMERICAN, G. & S.	Van Horn District.	Thos Brownjohn	621 Clay street.
AMERICAN, G. & S.	Esmeralda District.	J. S. Luty	365 Montgomery st.
AMERICAN, G. & S.	Van Horn District.	H. H. Purkitt	Custom House.
AMERICAN, G. & S.	Van Horn District.	E. Barry	636 Sacramento st.
AMERICAN, G. & S.	Virginia District.	G. B. McAvoy	712 Montgomery st.
AMERICAN, G. & S.	Virginia District.	C. L. Farrington	500 Sacramento st.
AMERICAN, G. & S.	Virginia District.	W. F. Dean	53 Mont'ry Block
AMERICAN, G. & S.	Silver City.	W. E. Dean	53 Mont'ry Block
AMERICAN, G. & S.	Gold Hill District.	H. J. Jones	321 Front street.
AMERICAN, G. & S.	Devil's Gate Distr.	James Evans	338 Montgomery st.
AMERICAN, G. & S.	Silver Mt. Mono.	Wm W. Hedges	617 Montgomery st.
AMERICAN, G. & S.	Slate Range District.	H. Gager	Merchant st, nut blk.
AMERICAN, G. & S.	Telescope District.	A. H. Clark	622 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	David Wilder	622 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	T. L. Bibbins	305 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	T. L. Bibbins	305 Montgomery st.
AMERICAN, G. & S.	Virginia District.	C. V. Hobart	505 Montgomery st.
AMERICAN, G. & S.	Humboldt District.	G. H. Hedges	606 Montgomery st.
AMERICAN, G. & S.	Humboldt District.	V. B. Post	Lucas & Turner bldg.
AMERICAN, G. & S.	Sonora, Mexico.	J. F. NeSmith	502 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	Joseph R. Beard	4 Armory Hall.
AMERICAN, G. & S.	Esmeralda District.	H. H. Purkitt	Custom House.
AMERICAN, G. & S.	Esmeralda District.	Jno Woodthorpe	626 Clay st.
AMERICAN, G. & S.	Flowerly District.	David Wilder	622 Montgomery st.
AMERICAN, G. & S.	Flowerly District.	M. G. Elmore	628 Montgomery st.
AMERICAN, G. & S.	Flowerly County.	M. G. Elmore	628 Montgomery st.
AMERICAN, G. & S.	Del Monte District.	E. Barry	636 Sacramento st.
AMERICAN, G. & S.	Esmeralda District.	C. H. Wakelee	612 Merchant str.
AMERICAN, G. & S.	Virginia District.	Henry Toomey	Mont & cal st.
AMERICAN, G. & S.	Flowerly District.	James Pick	707 Sansome st.
AMERICAN, G. & S.	Aurora, Mono Co.	A. Davidson	608 Montgomery st.
AMERICAN, G. & S.	Sun Antonio District.	A. S. Gould	Oakland & Stryker st.
AMERICAN, G. & S.	Butte, Gate Dist.	J. F. Bailey	Oakland & Stryker Bldg.
AMERICAN, G. & S.	Bu. Vis. dis. Hum.	J. S. Luty	305 Sacramento st.
AMERICAN, G. & S.	Silver city.	J. J. Cushing	727 Clay street.
AMERICAN, G. & S.	Esmeralda District.	Jno Woodthorpe	626 Clay st.
AMERICAN, G. & S.	Esmeralda District.	S. Pattee	622 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	S. Pattee	622 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	C. H. Gager	Merchant st, nut blk.
AMERICAN, G. & S.	Humboldt, N. Ter.	J. H. Gager	Merchant st, nut blk.
AMERICAN, G. & S.	Esmeralda District.	T. L. Bibbins	305 Montgomery st.
AMERICAN, G. & S.	Slate Range District.	W. W. Lawton	400 Montgomery st.
AMERICAN, G. & S.	Esmeralda District.	Wm L. Duncan	Pioneer Buildg.
AMERICAN, G. & S.	Slate Range District.	J. H. Blood	7 Montgomery Bldg
AMERICAN, G. & S.	Slate Range Distr.	A. H. Clark	622 Montgomery st.
AMERICAN, G. & S.	Del Norte District.	M. G. Elmore	628 Montgomery st.
AMERICAN, G. & S.	Colorado District.	M. G. Elmore	628 Montgomery st.
AMERICAN, G. & S.	Tuolumne county.	John B. Russell	410 Montgomery st.
AMERICAN, G. & S.	Slate Range District.	W. W. Lawton	400 Montgomery st.
AMERICAN, G. & S.	Coso District.	W. W. Lawton	400 Montgomery st.
AMERICAN, G. & S.	Chihuahua, Mexico	W. Blackwood	724 Merchant st.
AMERICAN, G. & S.	Gold Hill District.	Wm V. Garvey	619 Merchant st.
AMERICAN, G. & S.	Gold Hill District.	Wm V. Garvey	619 Merchant st.
AMERICAN, G. & S.	Gold Hill District.	J. F. Sterling	327 Commercial st.
AMERICAN, G. & S.	Tulare county.	Barclay Hecley	Express Building.
AMERICAN, G. & S.	Humboldt District.	A L Chamberlin	413 Montgomery st.
AMERICAN, G. & S.	Humboldt District.	W. A. Cornwall	628 Clay street.
AMERICAN, G. & S.	Russ District.	David Wilder	622 Montgomery st.
AMERICAN, G. & S.	Slate Range District.	David Wilder	622 Montgomery st.
AMERICAN, G. & S.	Lower District.	Henry Toomey	612 Merchant str.
AMERICAN, G. & S.	Virginia District.	Th's Brownjohn	621 Clay street.
AMERICAN, G. & S.	Gold Hill District.	W. W. Gröss	712 Montgomery st.

Name of Company	Location of Mine	Secretary	Locality of Office	Name of Company	Locality of Mine	Secretary	Locality of Office
HALE & NORCROSS	Virginia District	J. F. Lightner	Metropolitan bl'k.	SOTOMAYOR	Emeralda District	T. L. Bibbins	366 Montgomery st
H. PETERSON	Humboldt Nev. Ter	L. Francou	Lucas & Turner bld	SENEGA	Emeralda District	T. L. Bibbins	366 Montgomery st
H. WELBY	Devil's Gate Dist	C. Stevens	60 Perrotts Building	JUNO	Emeralda Dist	M. G. Elmore	302 Montgomery st
HATHCO	Emeralda District	J. H. Forkitt	Custon House	SAN ANTONIO	San Antonio, L. C.	P. Van Pelt	321 Sansome st
HAY & S. M. CO.	San Antonio, L. C.	David J. Miller	326 Montgomery st	TABLE MTS COP. CO.	Calaveras County	M. G. Elmore	528 Montgomery st
HACK	Emeralda District	James Neary	326 Montgomery st	DEBORG	Lower California	H. C. Kibbee	cor Sansome & Cal
JACK HAYES	Emeralda District	J. H. Blood	7 Montgomery st	TRINACON	Emeralda District	J. H. Blood	7 Montgomery st
JEWELL	Devil's Gate	Samuel Marx	610 Washington st	TRINACON	San Antonio, L. C.	W. Shiverick	Mer. st. Mtngy bldg
JOSHEPHINE	Coso District	W. W. Lawton	400 Montgomery st	TRANS-MONTANE CO.	Sierra Deuch Fam	W. E. Moody	406 Montgomery st
JASON M CO	Sierra District	L. Maubec	716 Montgomery st	TITON & S M CO.	Virginia District	W. E. Moody	406 Montgomery st
JEFFERSON	Gold Flat Nev Co	T. L. Bibbins	366 Montgomery st	NIGHTINGILL	Cinnabar District	A. L. Chamberlain	713 Montgomery st
J. C. ASSTEN M CO	Gold Flat Nev Co	W. W. Lawton	400 Montgomery st	TRICHAETACT	Colorado Near Mex	B. B. Holmes	712 Montgomery st
KEOKO	Emeralda District	H. C. Walker	612 Montgomery st	TURKEY TUNNEL CO.	Emeralda District	P. B. Cornwall	608 Merchant st
KATK	Humboldt Nev Ter	L. Francou	Lucas & Turner bld	TURKEY TUNNEL CO.	Emeralda District	P. B. Cornwall	608 Merchant st
KOHLER BROS	San Antonio, L. C.	Kohler Bros	Sansome street	UNION	Virginia District	S. R. Reamy	7 & 8 Guy's House
KOHLER	Emeralda District	James Neary	326 Clay st	VALADAO MNG CO.	Russ District	J. D. Holmes	406 Montgomery st
LA BUNCA M CO.	Sierra, Mexico	Glas's Frieberg	408 Clay street	VALADAO MNG CO.	Lower California	J. D. Holmes	cor Mercer & Cal
JAYE YANKEE G CO.	Shute Range District	W. W. Lawton	400 Montgomery st	VEATCH S M CO	Simpson's Park	E. B. Creigh	712 Montgomery st
LADY OF WASHINGTON	Shute Range District	W. W. Lawton	400 Montgomery st	VIRGINIA ROGERS CO	Virginia District	E. B. Holmes	712 Montgomery st
LAMAR & CO.	San Antonio, L. C.	S. Post	326 Clay st	VIRBARD	Emeralda District	James Neary	326 Clay st
LA ARMISTED	San Antonio, L. C.	V. B. Post	326 Clay st	WILKINS	Virginia District	C. H. Wakeloe	612 Merchant st
LEXINGTON TCU. CO.	Star District	Charles Judd	Lucas & Turner's bldg	WILLOW	Virginia District	J. H. Sayre	324 Montgomery st
LEY DALE	Emeralda District	Joseph R. Beard	4 Army Hall	WASHER	Gold Hill District	A. A. Tompkins	cor Montgomery & Cal
LAS CRUCIZITAS M CO	Mexico	C. J. Brennan	cor Jack's & Fruit	WASHINGTON	Slate Range	W. H. Clark	406 Montgomery st
LAS CRUCIZITAS M CO	Emeralda District	James Neary	326 Clay st	WILLIAM PENN G CO	Devil's Gate Dist	Henry Teague	cor Mont & Cal
LOVA	Virginia District	R. N. Van Brunt	706 Montgomery st	WENSBICK	Coso District	V. B. Post	Lucas & Turner's bldg
LOUIS T & G CO.	Sierra District	R. N. Van Brunt	706 Montgomery st	WEST WEST M CO	Emeralda District	Col Dean	325 Montgomery st
LOUISA	Silver City District	J. F. Pope	706 Montgomery st	WHITE & MURPHY	Virginia District	J. P. Nourse	Lucas & Turner's bldg
JAYE AOK COPPER CO.	Gopher, Calav. Co.	J. H. Gager	Merchnt. mntbk	WIKONA	Montg District	M. G. Elmore	528 Montgomery st
LA MARRONESA	San Antonio, L. C.	Wm. Faulkner	411 Clay st				

## THE CENTRIFUGAL QUARTZ CRUSHER.

The great interest manifested, and numerous enquiries made, by letter and otherwise, with regard to this Crusher, have induced us to give an illustration of the machine, on our first page, accompanied with a description, and a very full analysis of the philosophy of its operation. With regard to its capacity or practicability we know nothing except by hearsay, and that information, together with our authority, we have fully communicated in the columns of the Press.

From the fact of its continued use at Pike's Peak, we are inclined to think well of it. The *philosophy* of its operation is evidently sound. A most important condition attending its use is, what appears to be a act, that it reduces the quartz to an impalpable powder, at one operation. A further important consideration is that it works the ore *dry*. The latter we consider of great importance, as we believe it is now pretty generally admitted that a very large percentage of the precious metals, especially in gold crushing, is invariably carried off with the water, in spite of the most carefully managed settling vats. We shall cheerfully communicate to the public any *facts* with regard to the actual results of this machine, which may reach us through any reliable channel.

**LITHOGRAPHER.**—Mining Companies, and others, in want of any kind of Lithograph Work, will do well to call upon R. W. FISHBOURNE, at 529 Clay St. Some of the finest and best designed Certificates of Mining Stock we have ever seen are from his place. See his advertisement.

THE MARY L. GARDINER.—We have received many enquiries with regard to the "Mary L. Gardiner" Company, of Esmeralda. We know nothing more of it than we find in our Esmeralda Letters. We presume our correspondent writes from knowledge obtained upon the ground, although in the absence of any other advices, holders, in this city, do not credit the reported "strike."

SKEDADDLE.—This word is said to be pure Irish. The Irish *sgedad* means scattered; *sgedad ol* means all scattered. An old version of the Irish New Testament contains this passage: "For it is written, I will smite the shepherd and the sheep of the flock shall be *sgedad-ol*." The word was probably first used in our army by an Irishman, and, being looked upon as particularly felicitous, was at once adopted.

PHYSIOLOGY.—Old Dr. Pearson, of London, in lecturing upon the stomach, observed that this organ had no power over substances endued with vitality, and that this circumstance accounted for the fact of the Prophet Jonah having remained undigested in the stomach of the whale for three days and three nights! This is a step further than theology ever went.

**MEDICAL PRESS.**—We have received the July number of the San Francisco Medical Press. It contains much that is original and interesting, from able writers.



## THE MINERS' LABORATORY.—NO. X.

## MORE ABOUT SULPHURETS.

MR. EDITOR:—The following account of some Norwegian processes, may be of interest to your readers, as a contribution to the method of working Sulphurets. I only regret that in one case I am unable to send you the results of comparative experiments.

The first method is due to M. Aas, of Thydal. Its economy is based on the production of what he terms spongy iron, for the purpose of reducing copper from the residues of furnacing. The ores contain but 2 to 3 per cent. of copper; the remainder is iron pyrites. The "burnt pyrites" are lixiviated to extract the sulphate of copper, and mixed with a small quantity of small coal and the reduction of the iron is effected with the hot gases from a furnace, of the kind used for generating combustible gases, and there known as "gas generators." The heat is below the melting point of iron, and, for such temperature, these gases are very economical. It is obvious that this spongy iron is much cheaper than cast iron, and is in a form most excellently adapted to the chemical process of extracting the copper by substitution in the vitriol. The difficulty of furnacing pyrites in the way indicated renders it doubtful how far this is practical for working copper; but I can speak to the facility with which iron may be manufactured in reverberatories from such sponge—I must defer the remainder of this communication till you have more room for

A POOR CHEMIST.

San Francisco, July 1st, 1863.

["A POOR CHEMIST" is always welcome to our columns, and will never be crowded for "room."]

## SPECIAL NOTICE.

Some weeks since we forwarded blank receipts to such of our subscribers as are in arrears for their subscriptions. Some have promptly answered by remittances of the amounts due; others have notified us of special contracts with our predecessor, or of full payments made to him and not credited on our books. Where payments have thus been made, we have, in every instance, allowed them. There are quite a number, however, who have returned no reply to the bills which have been sent out. We trust all such will respond immediately upon seeing this notice. If payments have been made, we wish to be notified of the fact, so that due credit can be given; and if there are any to whom the paper is now sent who do not wish to continue it or do not intend to pay their subscription, we hope they will notify us of the fact so that we may discontinue sending papers to them. We do not wish to crowd the paper upon any man. All the names upon our list have been placed there, as subscribers, upon what we have deemed good authority. If any party, not considering himself a subscriber and in arrears, has received a bill for subscription, he will confer a favor by notifying us immediately of the fact. Postmasters are also reminded of their duty to return a paper that is not called for, etc.

## OUR MINING DIRECTORY—SPECIAL NOTICE.

The large call upon us for space in our MINING DIRECTORY, compels us to decline to receive the names of all Companies who are not subscribers to the MINING AND SCIENTIFIC PRESS, either in their Corporate Capacity or by their Secretaries. We have removed the names of several Companies from our list, this week, for the above reason, and have been compelled to decline to receive the names of several others, for the same reason. We trust that our mining friends will fully agree with us in the opinion that no one is a proper person to act as Secretary of a Mining Company, who declines or neglects to take the only Mining paper in the State, and to pay for the same.

THE TEACHER.—The first number of this journal has just been issued. A journal of this kind seems to us, almost indispensable to the growth and prosperity of our schools.

THE PACIFIC MONTHLY.—This magazine has again made its appearance on our table. We congratulate the proprietors of this periodical upon the happy faculty which they possess, to please their readers.

## RYERSON'S SUBMARINE EXPLORER.

We have devoted considerable space in another portion of the paper to a brief review of the history and progress of submarine machines, and given a somewhat minute description of "Ryerson's Submarine Explorer," the latest improvement in this direction. The chief feature of this invention, and the principle upon which it is based is the fact discovered by Prof. Ryerson that during the passage of spray through air vitiated with carbonic acid, the air is not only restored to its normal condition and fitness for sustaining both combustion and respiration, but that there is actually an excess of oxygen in air after this treatment. Prof. Ryerson, to account for this valuable phenomenon, has made calculations based upon the analyses of the late Dr. Deck, which lead him to the conclusion that a decomposition of the carbonic acid is instantaneously effected at the same time. Prof. Ryerson has informed us that the same effect is produced with fresh as with salt water and this in connection with the subjoined analyses seems to preclude the possibility of any other supposition.

{Copy.]

ANALYTICAL LABORATORY AND  
OFFICE OF CONSULTING CHEMISTS,  
No. 18 Exchange Place, near Hanover st., N. Y. }

I have analyzed samples of air collected from Ryerson's Submarine Explorer, by myself, as in the margin, and certify it to contain as under.

After the air had been breathed for over an hour by three full grown men, at twenty feet under water, with a pressure of one and a half atmosphere (1½), and candles failing and respiration laborious, 100 cubic inches measure contained:

Oxygen.....	20.65
Nitrogen .....	70.00
Watery vapor.....	1.10
Carbonic acid gas.....	8.25

Total.....100.00

Weight of 100 cubic inches at 60 deg., 33.060 grains.

There were traces of sulphur, ammonia and chlorine. The air was so impregnated with carbonic acid gas as to render lime water rapidly turbid.

When the fine pump spray had been playing from three to five minutes through the chambers, another sample was taken, and analysis showed 100 cubic inches measure.

Oxygen.....	22.00
Nitrogen .....	75.00
Watery vapor.....	2.85
Carbonic acid gas.....	0.15

Total.....100.00

Weight of 31 cubic inches at 60 deg., 31.025 grains.

There were traces of chlorine, (more than before,) no sulphur, no ammonia, no turbidity in lime water, and the breathing free and agreeable.

On my second descent in the Explorer, when I had every opportunity of observing its workings and took the accompanying samples for analysis, remaining over three hours without the slightest inconvenience, no air whatever was taken in the interior from the surface or from the compressed air chamber, and I have no hesitation in affirming that we could have remained twenty-four hours below, the air being purified and revived by the use of the spray pump.

ISAIAH DECK, M. D.,

Analytical and Consulting Chemist

The samples were obtained by Dr. Deck in the usual way, i. e. by taking bottles of water down in the apparatus and emptying them when it was desired to collect a portion of the air for the analysis. The result shows that after the application of the spray the air was purer than the ordinary atmosphere.

Again, under date of September 21, 1859, nearly a year subsequent to the date of the above, the Doctor gave the following as the result of a second analysis:—

"I have made an analytical examination of two or more samples of air, pure and impure, collected from Ryerson's submarine explorer, in the presence of six persons who descended in it and certify the results to be as follows:

After the air had been so far breathed by the above persons, without any connection or supply of air from the surface, so that the candles went out and breathing became oppressive, it contained in 100 parts:

Oxygen.....	16.00
Carbonic Acid.....	8.00
Nitrogen and Aqueous Vapor.....	76.00

Total.....100.00

When the spray-pump had been played for about ten minutes, and the candles and breathing freshened, it contained in 100 parts:

Oxygen.....	26.00
Carbonic Acid.....	1.50
Nitrogen and Aqueous Vapor.....	72.50

Total.....100.00

By these results the efficacy of the spray-pump in reviving the impure air, and doing all that is claimed for it, is undoubted—the revived air containing 10 per cent. more oxygen than the impure, and 5 per cent. more than the ordinary atmosphere.

ISAIAH DECK, M. D."

It will readily be perceived that the principle upon which this Submarine Explorer is founded, admits of its application in various ways. By varying its form, we have a complete SUBMARINE BOAT, capable of sustaining itself at any desirable point beneath the surface, without any connection with the upper air, and with unrestricted powers of locomotion, as capable of being directed by compass in its submarine navigation, as any floating craft would be in a dark night, on an enemy's coast, where the lights were extinguished. In this form, it may be rendered a most powerful submarine protection for harbors.

Again, as a diving bell, it must certainly, prove a most admirable piece of machinery for *Pearl Fishing*, as, by its assistance, the diver may go down to the bottom of the sea, and, where it is smooth work with as much facility as he could in a mere babbling brook. He can remain down the entire day, if he chooses, open his shells at his leisure, and make choice upon the spot, of those only which are valuable. Three men by the use of this apparatus could do as much work as a hundred by any other appliances hitherto devised.

This principle of purifying vitiated air, it will furthermore be seen, is eminently applicable to the ventilation of mines. But our remarks have already extended to a greater length than we had intended, and we close, with the intention of making further allusion to it in our next issue. The principle involved in this invention is one of the most interesting discoveries of the age, and, we think, our scientific readers will duly appreciate the space we have allotted to it.

INCIDENT.—The San Andreas Register relates the following incident connected with the Keystone Copper Mine, which shows how dame fortune often rewards those who persistently seek her favors. Mr. and Mrs. McCarty each owned an interest in the claim, and Mr. McCarty sold his interest some time since for \$10,000, and endeavored to persuade his wife to sell hers, which she refused to do. To-day she can take \$100,000 for the same interest.

## THE MINING SHARE MARKET.

The unusual excitement in the Mining share Market, noticed in our last issue, has materially subsided, and most of the leading stocks, which so suddenly advanced, have declined. The Market for the past six days has been somewhat fluctuating, and the transactions quite limited compared with the extraordinary business of the week previous.

Gould & Curry has declined to \$5,600, with a limited demand.

Ophir shares have been in considerable demand at about previous rates. 144 shares have changed hands the past week at \$2,500.

Central has been enquired for at \$2,850; sellers to the extent of 12 shares have been found at that figure. The sudden enquiry for this stock has been in consequence of advices from the mine that ore of superior quality has been struck, with indications of continuance.

California, adjoining the Central, has been effected to some extent by the favorable reports from the latter mine, and has also been called for at \$15.00. Twelve shares have changed hands at that figure. The stock in both these companies is confined to a few hands and held firmly.

The fact of a known location on the Comstock lead, with undisputed titles, renders the holders of stock in these two Companies, perfectly content to wait the gradual development of their mines; hence their stock is seldom effected.

Daney shares have fluctuated greatly, ranging from \$240 @ \$330, closing the week at about \$300. Seven hundred and forty shares have found buyers during the week at the figures named. The July dividends which were sold for \$13 @ \$14 ten days since, dropped to \$4 @ \$8 on Tuesday last, at which rates the dividends on 750 feet were sold. (See Report of Transactions.)



## THE COPPER INTEREST.

We continue to hear encouraging reports of the copper interest, from every direction where any attention has been paid to searching after that mineral. Stocks in all the leading mines are constantly advancing, and the attention of capitalists is being quite generally directed to this class of mines as extremely valuable property for permanent investments. Of the many discoveries which have been announced, it is hardly to be expected that anything like a majority will prove productive; yet sufficient developments have already been made to satisfy capitalists and the public that we may reasonably look to the copper interest as one of high promise, and one which, at an early day, must occupy an important position among the industrial resources of the State.

## TRANSACTIONS IN SHARES, FOR THE WEEK.

## MONDAY.

2 Iowa	135	28 do.	120
8 Pride of the West	140	29 do.	125
3 do.	130	5 do.	125
10 Rhodes Diggings	50	5 do.	126
20 Daney	330	10 do.	125
40 do.	310	2 do.	134
12 do.	310	2 do.	136
8 do.	315	40 do.	130
40 do.	310	15 do.	25
44 do.	300	5 Melones	150
58 do.	40	10 Pond	23
60 do.	315	10 Overman	400
40 Union, R. D.	1 50	10 Bullion, G. H.	75
20 Burning Moscow	160	5 Dick Sides	650
20 do.	160	5 do.	645
20 do.	160	10 Peyton, V. D.	12
20 do.	160	25 Madison	28
2 do.	152 50	10 Cedar Hill Tunnel	3
33 North Potosi	50	2 Pride of the West	127 50
5 Sierra Nevada	55	1 De Soto	95
70 Meredith	50	10 Lucerne	25
6 Wide West	120 50	10 Silver Star	40
		10 Melones	152 50

## TUESDAY.

12 Daney	305	10 Blue Ledge, El Dorado	10
8 do.	302	10 Mount Hope, Gold Hill	12 50
28 do.	300	20 do.	14
4 do.	302	10 Sierra Nevada	65
20 do.	300	2 Savage	3 50
12 do.	300	2 do.	3 50
4 do.	297 50	10 Peyton, V. D.	25
40 do.	275	5 Real del Monte	152 50
10 Burning Moscow	175	10 Buckeye	30
24 do.	160	20 Red, White and Blue	9
12 Meredith	62 50	10 North Potosi	53
10 do.	60	20 Sheba H.	423
10 Sacramento	80	10 Overman	350
20 do.	12	15 do.	375
2 Wide West	135	5 Dick Sides	650
3 do.	140	5 do.	650
2 do.	142 50	1 Hale and Norcross	2,000
15 do.	145	1 do.	2,100
10 do.	160	10 North Ophir	10
6 do.	155	5 Melones	140
10 do.	150	50 Cleveland	6
25 do.	157 50	10 do.	137 50
30 Silver Hill	35	Dividend on 200 ft. Daney for July	88
10 do.	35	do. 50	\$7 per foot
25 Madison	28	do. 50	\$5 per foot
15 do.	27	do. 100	\$4 per foot
15 do.	29	do. 100	\$5 per foot
20 do.	30		

## WEDNESDAY.

4 Daney	275	25 do.	55
4 do.	255	20 do.	55
8 do.	255	20 do.	50
20 do.	240	17 Wide West	175
20 do.	260	10 do.	175
2 do.	275	5 do.	175
10 do.	175	6 do.	175
10 Hale and Norcross	2,125	1 do.	175
10 do.	1,900	5 do.	175
10 Bullion, G. H.	85	2 do.	175
20 do.	82 50	10 Gov Nye	10
1 do.	85	1 Central	2,850
8 do.	82 50	5 Chert	37
9 do.	80	5 Overman	370
25 Buckeye, D. G.	30	15 El Dorado	80
10 Hawley	38	10 Adriatic	5
10 North Potosi	52		

## THURSDAY.

4 Gould and Curry	5,600	2 North Potosi	57 50
4 do.	5,600	2 do.	50
20 Chollar	3,800	10 Bullion, G. H.	82
20 do.	950	10 do.	82 50
24 Daney	290	8 do.	81 50
52 do.	302	10 Burning Moscow	155
20 do.	315	20 do.	145
4 do.	302	5 Michigan, Gold Hill	55
17 do.	17	15 Buckeye	33
10 Blue Ridge, El Dorado	10	16 do.	38
6 Wide West	175	30 do.	35
5 do.	185	5 Ethan Allen	30
5 do.	180	30 Madison	25
1 do.	175	10 Echo	145
6 do.	170	60 F. C. Loomis	1
30 do.	170 50	July Div. on 50 feet of Daney	88
2 Hale and Norcross	1,900		

## FRIDAY.

40 Meredith	60	25 North Potosi	55
35 do.	55	500 Federal Hope	15 cts
5 Wide West	165	15 El Dorado	80
3 do.	160	20 Utah	70
17 do.	160	5 Iowa	30
10 do.	160	5 Pond	20
10 do.	142 50	40 Daney	310
4 do.	140	12 Daney	300
10 do.	135	4 Lucerne	27 50
58 North Potosi	47 50	1 Sheba	450
45 North Potosi	55	2 Sheba	430

## GENERAL MINING STOCK REPORT.

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending July 4, 1883.

Names of Companies.	Total No. Shares.	Shares per ft.	Per Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2435	2425	2405	2450	2450	—
Gould & Curry	4,800	4	600	6700	6000	6100	6000	6000	—
Central	1,800	12	300	—	—	—	—	—	—
California	3,800	12	300	—	—	—	—	—	—
Chollar	6,800	4	300	850	825	915	900	900	—
Potosi	2,800	2	500	—	650	600	690	600	—
Hale & Norcross	80	500	1825	—	1900	1900	1900	1500	—
Sierra Nevada	3,000	1	500	60	55	61	52 1/2	55	—
Buena Vista	8,000	4	600	300	301	280	295	300	—
Burning Moscow	4,800	2	100	150	150 1/2	140	130	130	—
North Potosi	2,000	1	300	60	53	52 1/2	55	55	—
Rogers, F. D.	3,000	1	250	—	—	—	—	—	—
Meredith	7,200	2	125	50	53	55	56	55	—
Charles Caney	1,800	1	30	—	60	—	60	60	—
Sacramento	1,800	1	500	75	80	77 1/2	90	100	—
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	—	3500	3500	3500	3200	—
Iowa	—	—	—	—	150	130	122 1/2	132 1/2	—
El Dorado	—	—	—	—	70	60	70	80	—
Norton	1,600	1	11	11	10	11	10	11 1/2	—
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	—	17	17	16	17	17
Adriatic	—	—	—	—	—	—	—	—	—
Brennus	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel	10,000	1	100	3	2 1/2	2 1/2	2 1/2	2	—
Mount Davidson	10,000	1	200	—	3	3 1/2	8	—	—
Pride of the West	—	—	—	125	110	100	95	95	—
G. H. Quartz M. Co.	—	—	—	—	—	—	—	—	—
Imperial	—	—	—	—	—	—	—	—	—
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	1	600	124	148	175	170	135	—
Antelope	1,200	1	500	—	—	—	100	—	—
Esmeralda	1,600	1	1000	—	18	18	—	—	—
Real del Monte	4,400	1	400	145	125 1/2	145	145	160	—
Etna	1,200	1	100	—	70	72 1/2	—	67 1/2	—
Porter	1,600	1	250	—	—	—	—	—	—
Silver Hill	3,000	1	500	—	35	34	34	34	—
Nevada	1,200	1	250	—	25	20	—	20	—
Federal Hope	—	—	—	—	—	—	—	—	—
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	—	—	—	—
Falls of Clyde	—	—	—	—	5 1/2	—	5	4	—
Sanborn, S. W. ex.	—	—	—	—	—	—	—	—	—
Imperial	600	1	500	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Josephine	4,800	2	250	11	11	10	9	9	—
Coso	5,600	1	600	—	—	—	—	—	—
Willow Springs	2,700	1	100	—	—	2	4 1/2	4	—
Empire	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	1	1000	—	—	—	—	—	—
Diablos Padres	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	—	—	—	—	—	—
Josephine	—	—	—	—	—	—	—	—	—
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	—	—	—	—	2	2 1/2	2 1/2	2	—
Utah	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	—	—	—	—	—	—

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, July 2, 1883.

Bid.	Ask'd	Bid.	Ask'd
<b>Virginia Mining District.</b>			
Sierra Nevada	\$ 9 10	Sierra Nevada	\$ 60 65
Sacramento	50 100	Sacramento	65 75
Shanrock	— 15	Shanrock	— 15
Golden	— 100	Golden	— 100
U. S. Tunnel	4 5	U. S. Tunnel	4 5
Utah	— 100	Utah	— 100
Old Virginia	— 250	Old Virginia	— 250
Washington	— 5	Washington	— 5
York	— 6	York	— 6
Zouave	— 17	Zouave	— 17

Bid.	Ask'd	Bid.	Ask'd
<b>Gold Hill District.</b>			
Alpha	500 850	Alpha	500 850
Battle	16 20	Battle	16 20
Bullion	85 95	Bullion	85 95
Belcher	1200 1500	Belcher	1200 1500
Branch Mint	7 —	Branch Mint	7 —
Caladonia	35 60	Caladonia	35 60
Coppers	20 40	Coppers	20 40
Eureka	20 40	Eureka	20 40
Forcade & Ricard	6 8	Forcade & Ricard	6 8
Gold Hill, Big Ledge	50 60	Gold Hill, Big Ledge	50 60
Golden Gate	— 5	Golden Gate	— 5
Golden Eagle (No. 1)	12 15	Golden Eagle (No. 1)	12 15
Hawkeye	20 25	Hawkeye	20 25
Hudson	20 25	Hudson	20 25
Koh-noor	150 175	Koh-noor	150 175
Leon	12 15	Leon	12 15
Laboring	12 15	Laboring	12 15
Lucerne	— 18	Lucerne	— 18
Mary Ann	45 55	Mary Ann	45 55
North American	35 40	North American	35 40
North Ophir	3 4	North Ophir	3 4
Overman	30 47 1/2	Overman	30 47 1/2
Oriental	5 —	Oriental	5 —
Omega	— 500	Omega	— 500
Princess	112 125	Princess	112 125
Sinaloa	15 20	Sinaloa	15 20
Swezey	— 10	Swezey	— 10
Stephenson-Kelch	8 9	Stephenson-Kelch	8 9
Union	40 45	Union	40 45
Yellow Jacket	1050 1400	Yellow Jacket	1050 1400
Uncle Sam	2 5	Uncle Sam	2 5
Yolo	— 10	Yolo	— 10
<b>Devil's Gate District.</b>			
Governor Nye	10 15	Governor Nye	10 15
Hawley	30 —	Hawley	30 —

## REMARKS.

There has been considerable activity in the Virginia Stock Market since our last quotations, and the general attitude of the Market has been firm, with advancing rates in leading stocks.

Some promising developments have been made in both the Virginia and Gold Hill Districts; among which are reported the York, Insurance, Pride of Washoe, La Fayette, etc. These discoveries have generally been made upon what are denominated the "back ranges."

Grass Valley is still in demand and is quoted at \$70 @ \$75. A new claim, of small extent, called the Ruby, located near the Moscow ledge, has come into notice, and is quoted at about \$125.

Many important changes have occurred since our last quotations, especially in Gold Hill Stocks. Yellow Jacket has been quite extensively dealt in at considerably advanced figures. Leon has also been in much request, but at reduced rates.

## ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, July 2, 1883.]

	Bid.	Ask'd		Bid.	Ask'd
Alpine	\$4	10	Keeney	20	—
Amador	—	5	Lave Yancee	—	20
Atlantic	—	6	Lord Byron	7	12
Arctic	—	6	Low Plater	—	12
Autelope	200	—	Mahu Esmeralda	—	7½
Alturas	15	20	Mourore	—	40
Atina	—	—	McKiastry Tunnel Co.	5	—
Braziz	15	20	Monte Christo, Tunnel co.	—	40
Rodie Blind Consolidation	—	8	Mutual	—	10
Bodie Peak, Bodie District	10	15	Monte Bracey	—	10
Brilliant Star	10	15	My Plater, Gardiner	—	100
Barbott	60	10	Mina Roal	4	6
Bathum (Van Horn Dist.)	—	10	Meredith	—	10
Bodie Bluff, No. 1	12	15	North Willow Springs	—	35
Bodie Bluff, No. 2	—	5	New Esmeralda Consol.	—	6
Bouker Hill	—	10	Newton	30	—
Bonaparte, Tunnel comp.	5	10	Nevada, (Tunnel)	—	15
Campan	—	25	Old	—	20
Climax	—	10	Old Winnemucca	—	6
Crockett	85	100	Paul Tunnel Co.	—	5
Cape	—	5	Pacific	20	—
Clas Alpine	12	20	Pond	—	—
Davis, consolidation	—	5	Pride of Autelope	10	15
Durgul	—	9	Port (two ft. to the share)	—	15
East Esmeralda	—	8	Quincy Yancey Tunnel Co.	6	10
Excelsior	—	10	Red Bluff	—	20
Excelsior, Excelsior Dist.	6	10	Rebecca	—	20
Empire	28	—	Red, White & Blue	—	20
Franklin, Tunnel company	—	10	Stauffer Tunnel Co.	—	15
Fallsfall	20	—	Schenectady	7	10
Fallsfall, Consolidation	4	5	Strawberry	20	20
Fresno	9	12	Silver Hill	—	20
Gen. C. C. Clark	12	15	Silver Hill, Bodie District	54	—
Great Eastern	16	20	Seymour	25	—
General Hooker (Con.)	14	25	St. Louis	—	5
General Jackson	18½	14	Tuscan	3	—
Garibaldi	—	30	Tiger	4	—
Golden Harvest	—	5	Tucker	—	15
Golden Cross	15	20	Tennessee	12	25
Golden Seymour	—	25	Utah Tunnel	20	30
Golden Age	—	40	Utah	—	15.0
Great Britain	6	9	Ural proper	—	—
"Golden Era" Tunnel Co.	2	3	Ural [extension]	—	10
Greenback	20	35	William Tell	—	2½
Hanover	—	10	Wide West	—	—
Howard Tunnel Co.	—	15	Washington, Tunnel comp.	4	—
Herman	12	15	Western Summit	—	100
Herman	—	10	X-Eliza, Tunnel Consol.	—	—
Home Check, Excelsior Dis	3	5	consolidated	1½	—
Juniata	10	18	Yancey	45	60
			Cortes, consolidated	—	30



## ASSAYS!

Promptness and Accuracy Secured

By the Use of the Most Improved  
METHODS OF  
ANALYSIS!Advantageous Terms for Prospector's Clubs  
and Mining Companies.**J. H. CHURCHILL, M. A.,**  
(FROM EUROPE.)Room 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. j196**R. W. FISHBOURNE,****PRACTICAL LITHOGRAPHER,**  
ENGRAVER AND PRINTER,No. 539 CLAY ST., CORNER OF LEIDESDORFF,  
San Francisco, State and County Bonds, Stock  
Certificates, Bills of Exchange, Bills of Lading, Bank  
Checks, Landscapes, Architectural and Marine Views  
Show Cards, Labels, Etc., executed with neatness and  
dispatch. N. B. All orders in Crayon Work promptly  
attended to.

## MINING.

N. B. Mining Stock Certificates executed with prompt-  
ness and dispatch, and at greatly reduced rates. j196**J. F. & H. H. SCHAFER**

Manufacturers of and Dealers in

**BEDDING AND FURNITURE,**

of every description,

Blankets, Comforters, Sheets, Etc., Etc.

Nos. 504 and 506 Sansome Street,  
(Near Clay.) San Francisco.This Establishment is now generally known to be the  
Cheapest Place in the City for good Bedding.

Branch Store. . . . Road St., Nevada.

**Pacific Mail Steamship Company.**

## NOTICE.

**ARRANGEMENTS HAVE BEEN MADE**  
by which shipments of**Gold, Silver and Cop-  
per Ores**can be forwarded under through Bills of Lading from  
San Francisco to England, at reasonable rates. For fur-  
ther particulars apply to**A. B. FORBES, Agent,**  
28-1f Corner Sacramento and Leidesdorff streets.**Miners' Foundry**

—AND—

**MACHINE WORKS,****First St., between Howard & Folsom,**  
SAN FRANCISCO.**EVERY DESCRIPTION OF IRON AND BRASS MACHIN-  
ery, the Best and Most Economical, manufactured in the  
state of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:**Steam Engines and Boilers, Flower, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc., Etc.Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgam-  
ators and Water Wheels—some in operation and on exhibi-  
tion.Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere**HOWLAND, ANGEL & KING**  
San Francisco, February 23, 1863.**JAMES PHELAN,**

(LATE J. &amp; M. PHELAN.)

**IMPORTER AND JOBBER,****Wines, Liquors, Etc., Etc.,**  
Nos. 616 & 618 Front street,

P. DONAHUE. H. J. BOOTH. C. S. HIGGINS.

## UNION

IRON AND BRASS FOUNDRY.

(The First Established in the State.)

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

**HAVING ADDED TO THE SEVERAL**  
Departments all the recently improved Tools, this  
Establishment is now the most Extensive and Complete  
of any on the Pacific Coast.The undersigned are prepared to furnish, at short no-  
tice, Locomotive, Marine and Stationary Engines, of ev-  
ery size and description.

## BOILERS.

Locomotive, Fine, Tubular, Upright and Cylinder, fur-  
nished with or without engines, complete.Machinery and Castings of every description, Saw-  
mills, Grist Mills, Car Wheels, Derrick Irons, etc.**QUARTZ CRUSHING BATTERIES,**Embracing a great variety of Stamp, Mortar and Cam  
Patterns.**AMALGAMATING MACHINERY,**Varney's Improved Patent Pans and Settlers, Wakely  
Pans, Amalgamating Tubs, Plaisted's Grinders, Chile  
Mills, Concentrators, etc., etc.

## MINING PUMPS.

Cornish, Lift and Force Pumps, from four to  
eight feet stroke, with Pipes, Bob Mountings, and Gear-  
ing complete.

## HOISTING DRUMS.

For Shafts or Inclines, with clutch, friction or V cone  
Sole Agents and Manufacturers for the Pacific Coast, O.  
C. and G. M. Woodward's Celebrated Patent Safety  
Steam Pumps and Fire Engines.All Contracts and Orders executed with promptness  
and dispatch, and at reduced prices for Cash.  
je21 DONAHUE, BOOTH & CO.

## Giffards Injectors,

**FOR SUPPLYING BOILERS WITH FEED WATER**  
without Pumps No Mill or Mining Company  
should be without one of these valuable Instruments.  
Send for a Circular.

DAVID STODDART, Agent.

je22 Cor. Pine and Front Sts., San Francisco.

**I. C. E. KLEPZIG & CO.,****GUN MAKERS,**

...AND...

**DEALERS IN GUN MATERIALS,****733 Washington street, San Francisco,**  
[One Door above Kearney street.]Repairing done in a workmanlike manner at the short-  
est notice.

Gilding, and also Silver Plating, by E. Ekland. je21

## CORNELL'S

**EXCELSIOR GALLERY,****650 Washington st. Three doors below  
Kearny.**Having refitted the above rooms the undersigned is  
now prepared to furnish the public with a superior style  
of Picture, at a lower price than ever before offered in  
the city.

## CARD PICTURES.

As I have every facility for producing these beautiful  
pictures, in all their different varieties, I have reduced  
the price to**\$3 PER DOZEN and \$2 PER HALF DOZEN!**Large size Photographs. \$3—Extra copies \$1 each.  
AMBROTYPES in all Styles and Prices.OLD PICTURES copied with care and accuracy, in any  
style desired, Particular attention paid to pictures of  
Children.Pictures painted in Oil or Water Colors, and retouched  
in India Ink by a competent artist.  
je22 R. H. CORNELL.**BAUNCHEIDTISM,****THE PRESERVER AND PRODUCER OF LIFE.****THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF**  
curing disease, is a "fait accompli" in medicine,  
and needs no more proof. The public has crowded Baun-  
cheidtism already with an extraordinary patronage, and  
it is acknowledged by all men of science that BAUN-  
cheidtism is founded on a rational, scientific basis.It is a safety, and with sure success is applied to pa-  
ralysis in consequence of Apoplexy, Podagra and Rheu-  
matism of every description, which kind of complaints  
can find their only relief by the above method.Especially can it be applied successfully, in the spring  
of the year to diseases of the eye.Dr. Borchers is the only doctor in California who has  
the original series of Dr. BAUNCHEIDT and his original  
oil. Dr. Borchers is also in possession of original letters  
of the inventor of the method by which he can prove  
that he is perfect master of the latter.

DR. J. C. BORCHERS.

No. 19 Kearney street, and No. 4, Mark's Place, First  
street, No. 5. Office hours from 9 to 11 A. M., and 1 to  
4, and 7 to 9 P. M. je21

## P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S**  
line to PANAMA, connecting via the Panama Rail-  
road with the steamers of the Atlantic and Pacific  
Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the  
month of May, 1863.**July 3d, - - - - - Stermer Golden Age****July 13th, - - - - - Steamer St. Louis****July 23d, - - - - - Steamer Constitution**Will leave Folsom Street Wharf, with Passengers and  
Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with  
steamships for New York.

For Freight or passage, apply to

**A. B. FORBES, Agent.**

je4 Corner of Sacramento and Leidesdorff sts.

## WHEELER'S

**Amalgamating and Separating Pans.**It is acknowledged by all who have examined the prin-  
ciples and witnessed the operation of these Pans, that  
they are decidedly superior for triturating and amalga-  
mating purposes to any other in use.The most important principle connected with the op-  
eration of these Pans is the separation of the triturating  
process from that of extracting the amalgam from the  
sand. The chief cause of loss of the precious metals aris-  
es from the passing off of the same in combination with  
the quicksilver, during the process of triturating, and in  
cleaning up. By the introduction of the Separating Pan  
to follow the triturating this loss is entirely avoided. In  
working these machines there is no appreciable loss of  
quicksilver, and hence none of the precious metals.Where these Pans have been introduced and operated  
by the side of others on exactly the same vat, the  
Wheeler Pans have uniformly gained a large percentage  
of metals over its competitors, as well as a still larger  
percentage in the amount of work performed.These Pans can be seen in daily operation, at the  
Miner's Foundry, on First street in this city, where all  
interested are invited to call and examine for themselves.  
je16-1f ZENAS WHEELER.**A. ROMAN & Co.,**

WHOLESALE AND RETAIL

**Book Establishment,****417 and 419 Montgomery street,  
SAN FRANCISCO.**Orders respectfully solicited and promptly attended to.  
A Treatise on Metallurgy, comprising Mining and Gen-  
eral and Particular Metallurgical Operations, Etc.  
Etc. By Frederick Overman.A Manual of Metallurgy, or A Practical Treatise on the  
Chemistry of Metals.Records of Mining and Metallurgy, or Facts and Mem-  
oranda for the Use of the Mine Agent and Smelter.  
By James Phillips and John Darlington.Manual of Metallurgy, more particularly of the precious  
metals; but including such others as are employed  
in dental practice.

Piggot on the Chemistry and Mining of Copper.

Practical Mineral Assaying and Mining. Overman.

Gold Mining and Assaying, by Phillips.

Miners' Companion and Guide, compiled by Silversmith.

Assayers' Guide; or Practical directions to Assayers, Min-  
ers and Smelters.

Practical Assaying, by Michell.

Silver Ores and Silver Mines, by Pro. Blake.

Ure's Dictionary of Arts, Manufactures and Mines.

Weisbach's Mechanics of Machinery and Engineering.

Neville's Hydraulic Formula Tables.

Fieson's Chemical Analysis.

**Together with many other works in this  
and similar lines**

Books imported to order on short notice. je21

**A. ROMAN & Co.****417 & 419 Montgomery Street.****P. M. STEAMSHIP COMPANY.**

## NOTICE.

**Until further notice, the Steamers of**  
Pacific Mail Steamship Company will hereafter be  
dispatched on the**3d, 13th and 23d of each month.**When any of the above date is fall on Sunday, the steam-  
er will be dispatched on the following Monday.  
**A. B. FORBES, Agent.****Wm. P. TAAFFEE,**

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,****CARPETS, DUCK, ETC.,****Cor. Front and Sacramento streets,**

SAN FRANCISCO.

## REYNOLDS'

**Patent Cut-Off and Governor,**  
FOR STEAM ENGINES.**127 of these Invaluable Machines,****ARE NOW IN USE**In California and Nevada Territory, giving a perfectly  
regular motion and  
Saving 20 to 65 per cent of the Fuel.**Steen's Improved Governor**Is the CHEAPEST, SIMPLEST and QUICKEST to act  
and least liable to get out of order of any Governor in  
use. It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.**Clark's Steam and Fire Regulator,**For controlling the Draft or Blast by opening the Chim-  
ney or Valve in the Blast Pipe by the pressure of the  
steam in the boiler. It will regulate the pressure to a  
pound, on the square inch. It CANNOT get out of order  
and any person can put one up in an hour after the dam-  
per is put in.**Ingersolls Patent Drill Press,**With which drilling can be done the same as with the  
common ratchet, and when small holes are wanted, it  
can be done four times as fast. The handle can be wor-  
ked in any direction.**Felt for Steam Boilers, Pipes, Etc.**

At the lowest market rates.

**Steam Engines, Boilers, Pipes,**Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.**Anti Incrustation Powder,**A Sure Remedy for Scale in Steam Boilers, without inju-  
ry to the iron. In use for the past EIGHT years.  
Refer to—Sugar Refinery, San Francisco,  
Cottrell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.**E. T. STEEN AGENT.**

No. 23 Fremont Street, San Francisco.

## MINING &amp; SCIENTIFIC PRESS.

**THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.****THIRD YEAR! VOLUME VI.—NEW SERIES!**A new volume of this extensively circulated paper  
commenced Sept. 11, 1862. It is intended that every  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits,  
together with several original engravings, of new inven-  
tions, etc., prepared expressly for its columns.This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietor to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published.**The Mining Interest!**Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of Mi-  
ning Stocks, new inventions of Machinery adapted to that  
purpose, and of everything generally that may be of ser-  
vice to the Miner.**The Inventor!**Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having had  
great experience as Patent Agents, together with facili-  
ties at Washington that enable them to obtain Patents  
with dispatch.**The Mechanic and Manufacturer!**Will be greatly benefited by its perusal, as its col-  
umns will from time to time contain original engrav-  
ings of new machines and inventions, together with a  
large amount of reading matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.**To Chemists, Architects and Millwrights.**This journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of infor-  
mation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plan-  
ters will not be neglected, engravings will be given of  
agricultural implements, and the farming interest gen-  
erally will be amply discussed.

## Terms.

To mail subscribers:—Four Dollars per annum

**Club Rates.**

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Fifteen Copies for Twelve Months, \$30.

Twenty Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscrip-  
tion is only \$2 50. Names can be sent in at differ-  
ent times and from different Post-offices. Specimen  
copies will be sent gratis to any part of the country.**EWER & SMITH, Publishers,**  
Room 27, (formerly) U. S. Court Building, Corner of  
Washington and Battery streets, San Francisco.



**DESKS**  
AND  
**Office Furniture,**  
OF ALL KINDS.....FOR SALE BY  
**JOHN WIGMORE,**  
No. 423 CALIFORNIA ST., SAN FRANCISCO.  
OFFICE JOBBING, of all kinds, attended to.

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19, First Street, San Francisco,  
Furnish Castings and Machinery of all kinds

ALSO;  
**GENUINE WHITE IRON SHOES AND DIES.**  
**PALMER, HANSCOM & CO.**  
**To Quartz Miners.**

**Knox's Improved**  
**AMALGAMATING PAN,**  
WITH  
**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.  
By its use is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be other wise lost. Made exclusively by  
**PALMER, HANSCOM & CO.,**  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

**T. C. Sanborn & Co.**  
**STOCK BROKERS,**  
No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**  
**GOULD & CURRY MINING STOCK,**  
**CHOLLAR MINING STOCK,**  
**CALIFORNIA STEAM NAVIGATION CO'S STOCK,**  
**BOUGHT & SOLD.**

**DEETKEN'S**  
**Chemical and Metallurgical Works,**  
On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED b. Chemical process. Yield of Sulphurets from 30 to 60 per cent higher than the BEST AMALGAMATION PROCESS.  
Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose.  
nov 8-3m

**LEWIS COFFEY AND RISDON,**  
**STEAM BOILER AND SHEET IRON WORKS.**  
The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.  
Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
LEWIS COFFEY J. N. RISDON.

**THEODOR KALLENBERG**  
**Maker of Models**  
**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.**  
No. 4 Sansome street, corner Market,  
n7.3m) San Francisco.

**International Hotel,**  
JACKSON STREET, ----- SAN FRANCISCO  
[A few doors above Montgomery.]  
**FIRE-PROOF BRICK BUILDING.**

Most convenient to the  
Steamer's Landing, Business etc. & Places of Amusement  
**OPEN ALL NIGHT.**  
City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Five Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.  
**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every room opens to the Light and Air. Each room is furnished with a first quality Patent Spring Bed and Hair mattresses. The International offers to guests the greatest number and  
**BEST FURNISHED FAMILY ROOMS;**  
and MEAS AS GOOD A TABLE AS ANY HOUSE in the City.  
I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.  
**F. E. WEYGANT, PROPRIETOR**

**Tremont House,**  
418 and 420 ----- Jackson Street,  
[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE, FIRE PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement

The City Railroad Cars pass the Door.  
The House is conducted on Temperance Principles,  
WHICH SECURES TO OUR GUESTS QUIET.  
The prices for board and Rooms are very moderate by the day, meal or week. We solicit A CALL FROM ALL.  
**F. E. WEYGANT, PROPRIETOR.**

For the accommodation of my many guests I have taken and refurbished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.  
**F. E. WEYGANT.**

**Volcanic Smelting Furnace.**  
PERSONS DESIRING INFORMATION AS TO THE USE and economical properties of this Furnace, and intending to make use of the same, when satisfied of its superiority over all other means of reducing ores and separating metals from the sulphurets, can obtain all needed explanation and advice in regard to the same, and the terms of sale of rights to use the same, on application Col. J. D. Stevenson or T. Ogg Shaw, or by letter to the proprietors through the Post Office of San Francisco. Drawings may be seen at the office of Col. J. D. Stevenson, No. 614 Merchant street, or at the office of T. Ogg Shaw, in Braden's Building, Montgomery street.

The time required for reducing ores by this Furnace is from three to eight hours, and the amount of fuel only one-tenth as much as is consumed by other processes.  
The process of condensation is applied to this Furnace which will save all those portions of precious metals which usually escape in a volatile form.  
The attention of all interested in the subject is requested to examine the important results obtained by this process.

Parties wishing will be allowed to erect a trial Furnace of capacity for smelting one ton of ore or more, on signing no obligation to pay the usual fee for the right to use it, should they continue to make use of the invention or a longer period than two months.  
mch 16 MRS. E. J. HALL, M.D., Proprietress.

**LEANDER RANSOM,**  
**Civil Engineer**  
AND  
**SURVEYOR,**  
Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO  
**STATE LOCATING AGENT.**  
And as such having the sale of  
600,000 ACRES OF STATE SCHOOL LANDS,  
At the low price of \$1.25 per Acre.  
Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

**The Occidental Hotel**  
IS NOW  
**Open for the Reception of Guests.**

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities.  
The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

**News Stand,**  
AND A LARGE  
**CABINET FOR MINERALS;**  
ALSO  
A Branch Telegraph Office,  
Connecting with all the lines throughout the country.  
LEWIS LELAND & CO.,  
Proprietors.  
San Francisco, Jan. 1st, 1863.

**John R. Sims,**  
  
Oregon street, between Washington and Davis and Fro and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and Shutters, Bank Vaults, Grating, Cemetery Railings.** All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

**Mr. Sims Appreciates the Past** liberal patronage of his friends, and trusts that he may continue to merit it in the future.

**For the Information of Strangers** he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attest. A large assortment of second hand shutters for sale at low rates. api3

**NATHANIEL GRAY,**  
**General Furnishing Undertaker,**  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

**FULTON FOUNDRY & IRON WORKS**

**HINCKLEY & CO.,**  
MANUFACTURERS OF  
**Steam Engines,**  
QUARTZ, FLOUR AND SAW MILLS; CAST IRON  
FRONTS, FOR BUILDINGS, MINING PUMPS,  
AND ALL KINDS OF MACHINERY, ETC.,  
FIRST STREET,  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*\*\* All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. Wm. A. FIELD.

**W. T. & J. GARRATT,**  
**City Brass and Bell Founders**  
Cor. First & Market sts., San Francisco.

**BABMET METAL CASTINGS, FIRE ENGINES, FORCE Pumps, and Lift Pumps, Church and Steamboat Bells, Tavern and Hotel Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."**

**SQUARZA'S PUNCH.**  
**FIRST PREMIUM**  
AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.  
ALSO; **FIRST PREMIUM**  
At the San Francisco Bay District Agricultural Fair, 1862  
MANUFACTORY, WHOLESALE AND RETAIL,  
No. 44 Leidsdorff street,  
Opposite the What Cheer House, San Francisco.

**To Mine Owners.**  
**PARTIES having a Good silver Mine** and wishing for Machinery to work it for an interest in the Mine Will do well to apply at this office. No organized company need apply.

**50 lbs. MARINE and Fire-Proof Paint,**  
MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

**DIRECTIONS:**  
For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**  
When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**  
HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.  
ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
G. T. Fougere, Superintendent.  
**WORKS, North Beach: Office, 509 Sacramento st., San Francisco.**

**WRIGHT'S PICKS.**  
**JOHN WRIGHT**, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.  
**JOHN WRIGHT, 511 Market street,**  
Opposite Battery, San Francisco.

**REMOVAL.**  
**OFFICE OF THE PACIFIC METALLURGICAL** Office is removed to 509 Sacramento street Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.  
Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
**COPPER ORES**—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

**WANTED,**  
**GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,**  
BY **FRONTIER A. DEVIERCY,**  
13 ap 487 Pine street, San Francisco.

**FREDERICK MANSELL,**  
**MECHANICAL & ARCHITECTURAL DRAUGHTSMAN,**  
No. 422 California street, corner of Leidsdorff.  
Drawings of MODELS made for parties applying for patents at Washington or London. mar 23 2m

**HAYNES & LAWTON,**  
IMPORTERS AND DEALERS IN  
**CROCKERY,**  
GLASS WARE,  
**FRENCH CHINA,**  
Coal Oil Lamps, Table Cutlery,  
**CLOCKS,**  
Silver Plated and Britannia Ware,  
ETC., ETC., ETC.  
NO. 516 SANSOME STREET,  
[CORNER OF MERCHANT.]  
SAN FRANCISCO.



## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been spent upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

### METHOD OF CRUSHING ORE.

The BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the severest of all test—that of constant use—and in every case has been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1860, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes with four and five Stamps, etc. The Four Stamp Battery weighs, when complete, about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed, when desired, is cast in sections, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owens River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

### MANUFACTURED ONLY BY

**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

on 125 to 136 First street, and 126 to 144

Fremont street.

## APARTMENTS.

FURNISHED APARTMENTS, WITH, OR WITHOUT Board, at 1018 Powell Street, between Clay and Washington Street. Persons desirous of a respectable home will do well to apply. Jy6

## E. C. DAKE, DEALER IN CLOTHING,

AND

Gentlemen's Furnishing Goods;

ALSO

HATS, CAPS, ETC.

At THE NEW YORK CLOTHING STORE,

541 & 543 Washington st. Montg'my Bk  
je] Old No. 145. [29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY

PEASE, BOWLEY & CO.,

Real Estate, Stock and Exchange

BROKERS,

621 Montgomery street, San Francisco.

LEGAL TENDER NOTES AND MINING STOCKS,

BOUGHT & SOLD.

je-29

## PUMPS!

HARRISON'S

California Lift and Force Pump,

WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

ALL SIZES;

Capable of throwing from ONE HUNDRED TO FIVE THOUSAND Gallons per Minute—For sale by

C. H. HARRISON,

PHOENIX OIL WORKS,

je-15

517 Front Street, San Francisco.



**DR. H. AUSTIN,  
DENTIST,**

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

L. F. LELAND,

STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board je-29

### New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

MORGAN, STONE & CO.  
je-29 108 Front Street, San Francisco.

## Napoleon Copper Mining Company.

Capital Stock.....\$1,620,000.

2,700 Shares—\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACCRELLISH  
Secretary.....Q. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....RICHARD POWNIFG

### TRUSTEES.

F. MACCRELLISH, of Alta California  
M. ERLÉNBACH, of Greenberg, Eriebach & Co.  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je-29

San Antonio Gold and Silver Mines,  
LOWER CALIFORNIA,

FORWARDING & MINING AGENCY.

SAMUEL SMITH,

OFFICE—North West Corner of Front and Clay Streets, San Francisco.

MINING MACHINERY AND MERCHANDISE FORWARDED, Mining Claims secured, through the resident Agent at San Antonio, and information furnished regarding any claim, in that Territory, on Commission. je-26

PEOPLE'S

Steamship Line!

Connecting California and New York  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

MOSES TAYLOR,

J. H. BLETHEN.....COMMANDER

Will be dispatched for

SAN JUAN DEL SUR,

From Mission street Wharf.

THURSDAY, - - - - JULY 23, 1863.

Punctually at 9 o'clock, A. M., on Connecting at GREYTOWN with the Splendid Steamship AMERICA - - - - - 2500 Tons.

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route. These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers. For further information apply to I. K. ROBERTS, Agent,

## FOR SALE.

PATENT PRESSED RUSSIA IRON MINING PANS.

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

UNEQUALLED  
MONITOR COOKING STOVE  
OR RANGE,

FOR HOTELS.

To which we call particular attention.

je-29

TAY, BROOKS & BACKUS.

### The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF

COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,

LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-tf Montgomery Street, San Francisco.

## A. C. MORSE,

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

HAVING MADE ARRANGEMENTS with MEX. S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

MYERS & DAGGETT'S

Mining and Stock Exchange,

No. 23½ B Street, Virginia City, N. T.

Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* \* Abstracts of Titles Furnished, Etc.

## MARTIN & Co.,

OFFICE--224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

Purchase of Copper Ores,

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN,  
New York.

J. F. GREENMAN,  
San Francisco.

San Francisco Post Office, Box 1269.

je 1.

New Patent Agency.

WE HAVE CONNECTED WITH THE Publication of the "Mining and Scientific Press"

The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office,) San Francisco. EWER & SMITH.

FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building. EWER & SMITH, Solicitors.

NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate. EWER & SMITH.

PATENT RIGHTS.

Patent Rights Bought and Sold, At the office of the "Mining and Scientific Press" Agency. EWER & SMITH.

IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper. Free of charge, they merely furnish the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

To Mining Companies.

FOR SALE—A STEAM ENGINE AND BOILER. The Engine is 30 horse power—10 inch cylinder—24 inch stroke—solid iron frame, with heater, pumps, etc., all complete. The boiler has 5 flues, is 24 feet long, 40 inches in diameter, made up from the best three-eighths inch Low Moor Iron, and weighs about 5000 pounds. Both Engine and Boiler are in perfect order and fully guaranteed. Apply to I. H. HAM, No. 211 Clay st. San Francisco, June 13, 1863. 3t

Office of the Nevada Copper Mining Co. March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees, J. ARMSTRONG, Secretary.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, JULY 13, 1863.

NO. 37.

Every person at all acquainted with the process of amalgamating Ores, knows that it is necessary to reduce the ore to the finest possible condition in order to obtain all the metal contained in it, and the quicker the ore is reduced to such a condition, the more rapid will be the process. To meet this necessity has been the object of the invention we illustrate to-day.

Most of the Amalgamators now in use, are constructed with mullers of some sort designed to reduce the ore while the amalgamation is going on, but the time required varies according to the speed at which the mullers can be run without producing too much agitation of the pulp. Some mullers do not make more than twelve to fifteen revolutions per minute, and from six to eight hours are required to reduce 200 pounds of ore to the requisite fineness, whilst other mullers run much faster and consequently do the work much quicker.

THE LITTLE GIANT AMALGAMATOR, promises to do the work in much less time than any other Amalgamator in use, when run at the same speed, as it has a double grinding surface. We copy the following description from the proprietor's circular:

Fig. 1 is a perspective view of the LITTLE GIANT AMALGAMATOR, with a portion of the top of the pan removed so as to show the position of the mullers when in their proper position for working. The mullers A B C are constructed in the following manner:

A is the bottom die furrowed or guttered, as represented by Fig. 3, and lies in the bottom of the pan, and is stationary when the runner is in motion. B is the runner, also furrowed or guttered on the bottom side, as shown by Fig. 3, except that the furrows cross each other so as to work shearing, like an ordinary mill-stone, when grinding.

This runner rests on the bottom die. The upper side of the runner is guttered or furrowed, as represented in Fig. 2. The top of the plate, A, is furrowed or guttered on the bottom side, the same as the top side of the runner is guttered or furrowed; and when placed on the runner, the gutters are reversed or made shearing, thus making a grinding surface. The top plate is stationary, but so arranged that it can be made to revolve upon the runner by means of the screws, E, E, E.

The top plate has slots or openings communicating with the gutters or furrows, so that the pulp is continually running through them when working. The pan is capable of amalgamating from 800 to 1000 lbs. at a time, from the fact that the top plate is stationary, the muller can be run at almost any speed desired without giving too much agitation to the pulp. The construction of the mill and runner is such that the pulp is driven from the center to the side of the pan in the bottom gutters, and from the side to the center of the pan through the top gutters,

## Coleman's Little Giant Amalgamator.

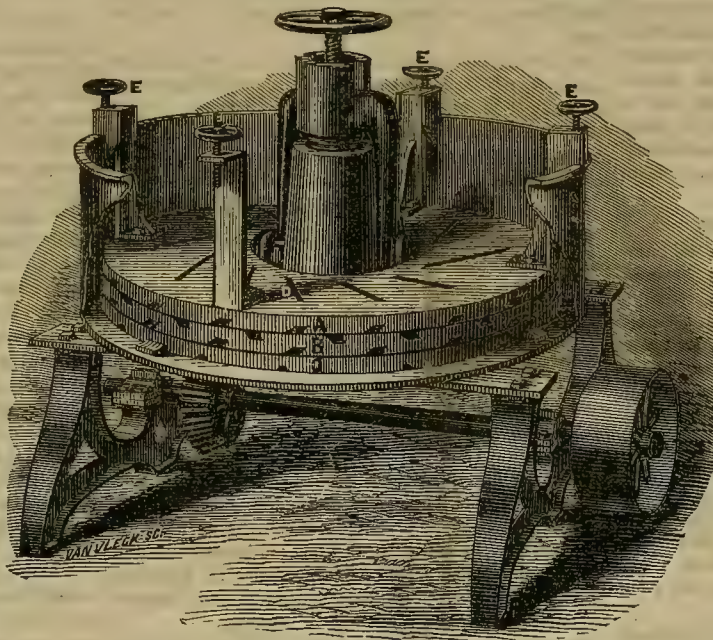


FIG. 1.



FIG. 2.

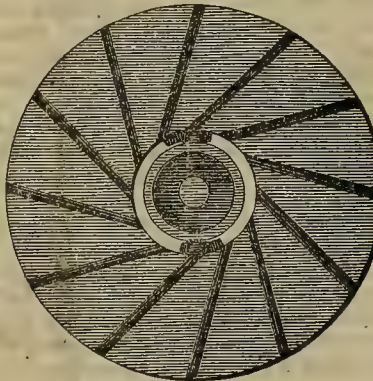


FIG. 3.

thus creating a constant motion back and forth through the gutters, and causing all portions of the pulp to pass between the grinders, and is thoroughly ground to an impalpable powder in about half the time of any other grinder in use. A most important point in connection with these grinders, is, that they are adapted to any pan in use, and those having other pans can have the mullers put into them at a small expense by forwarding size of pan and hub; also, the depth of the pan.

This pan may be seen in operation near

the Miners' Foundry, in this city, where all interested are invited to call and see for themselves.

Since the above illustrations were prepared the inventor of this Amalgamator has added a new and important improvement, which it is believed will add largely to its efficiency as an amalgamator. This improvement consists in casting the mullers with wrought iron strips in them, placed lengthwise between and parallel to the slots and

furrows of the dies and plates. When the amalgamator is working the wrought iron strips cast into the muller run against the similar strips cast in the stationary dies, thereby producing the same effect on the pulp as is produced in the "barrels" when working after the Frieberg Process.

MR. EDITOR:—Your announcement of Prof. Ryerson's valuable discovery in purifying the air in Diving Bells, suggests some further inquiry as to the liberation of the oxygen in the circumstances mentioned. Will some of your readers favor the public by discussing the probability of the newly observed action of spray, being due to what is known as the action of contact with finely divided substances, such as the combinations of nitrogen, effected by platinum-black—of hydrogen and oxygen by the same—of sulphurous acid and oxygen by oxides of chrome and copper? Is it not that the increased surfaces of the numerous drops of water absorb and condense gases such as carbonic acid, and modify the chemical affinity of their elements?

A POOR CHEMIST.

San Francisco, Ju'y 10, 1863.

PROGRESSIVE.—The Vulcan Foundry have found their Office too straight and narrow for them and have removed it to the rear, on First Street, and are now erecting a new and commodious Office upon the site of the old building.

SOUTH PARK QUARTZ MILL.—As will be seen by Messrs. Smith & Co's Advertisement, we have a veritable Quartz Mill in San Francisco. An examination of the Mill enables us to pronounce it also a very complete one. A moment's reflection will show its advantages at the present time. Persons coming to this city with ore of any description, can have it crushed at Messrs. Smith & Co's, under their own supervision, and learn to a fraction the value of their rock.

LUBRICATING OIL.—Many substitutes have been proposed for the more costly oil for lubricating machinery but hitherto with only partial success. An English patent consists mainly in the addition of caoutchouc to common grease the former being softened by spirit of turpentine; but it also contains other ingredients. For example: 10 gallons of water being heated, 1 pound glue and 10 pounds carbonate of soda are stirred in, 10 gallons of oil or grease are next added whereby a quasi soap is formed, and lastly 4 pounds caoutchouc, softened by turpentine, are incorporated.

The French process is as follows: Add one pint finely minced caoutchouc to 60 pints rape oil, and heat until the mixture is complete.—A very unctuous oil is thus formed, which remains fluid at freezing temperature, and does not clog the machines, but facilitates the motion of their parts.



## MINING CORRESPONDENCE.

NOTES OF A TRIP TO SLATE RANGE via LOS ANGELES AND EL PASO.—No. 5.

MESQUIT SPRINGS, JUNE 8TH, 1863.

MESSRS. EWER & SMITH:—Your favor of May 13, came to hand on the 5th, and I have to-day received some paper which enables me to go on with my correspondence, also, Nos. 26, 27 and 28 of the MINING AND SCIENTIFIC PRESS, for which I am much obliged. I believe that I can get some subscribers here for that work, as soon as a little currency begins to circulate. At present no one seems to be made of coin in any way. All who come here to prospect are well supplied with provisions, and tools, and those who have been out long enough to require supplies, notify their resident partners, in Los Angeles or San Francisco, and the goods are forwarded, and the bills of purchase and freight are all paid at Los Angeles or Frisco.

## SCARCITY OF CHANGE—SACKETT'S EXPRESS.

We would spend some change for paper, postage stamps, envelopes, &c., if there were any here for sale. There are none except the few each may have in his pocket, and we have to order a supply from Los Angeles, our nearest post-office and 147 miles South, requiring 30 to 60 days to get returns.

Your favors came by Sackett's Slate Range Express, advertised to leave Los Angeles promptly on the arrival of the Senator from San Francisco, taking freight and passengers, fare \$10 and walk all the way, and ten cts a pound for freight blankets, provisions, &c. On the 10th of April he arrived in Los Angeles from Slate Range, and now on the 5th of June, he is within two days of Slate Range, on his back trip. When horse Express teams get over the road in such style what can be expected from ox teams which are more popular on this route than horses.

## LAUREL HILL AND THE MINES GENERALLY.

About the middle of last month there was a general stampede of miners from all the camps to Laurel Hill about 15 miles North and the end of the El Paso range in that direction, leaving me to take care of the goods and chattels of three camps here. All still remain there and I am confined at the Springs and cannot leave to prospect or examine the claims which are taken up in this vicinity. Neither can I get any information from any one in regard to the first discovery of this District and its general history. I expect some of them back in a few days, to develop some leads which show very rich croppings.

There will be a number of tons of rock from various leads ready for shipment next week, and teams are expected to call for it, on their return from Owens River, Coso, &c., &c. I shall certainly be able to procure you some specimens next week and send them forward.

When we have returns from these lots soon to go forward we shall know more what to say of the District; at present we are quite in the dark, though our hope is large, and nearly every man has had experience in Slate Range, and considers this to be quite superior in some respects to that locality, and again a lead which will assay here one half as high as one in Slate Range would be equally as available, as there is water in plenty here, and wood can be delivered at less than half what it can there, and freight from Los Angeles can be landed here at half what it can at Slate Range.

## MILLS AND MILL PRIVILEGES, ETC.

We are about 45 miles southwest from Tehachapa Valley, where Messrs. Bright and Lyons have a saw mill in successful operation on a living stream of water, and they are preparing to erect a quartz mill of five stamps to run half the time. Again at Oak Creek 45 miles southeast, there is plenty of water power for a dozen mills, and we shall soon have a chance to crush and reduce our rock, if we find it as good as it looks.

Gentlemen, as soon as you find our croppings to be worth working, say at an expense of 75 dollars per ton, you might offer that machinery you advertise on your last page, to some parties having good claims here, and thus receive a permanent interest. [We are anxiously watching for those "croppings."—Publishers PRESS.]

Some of our best leads are now offered as follows: The owners will deed one claim of 1200 to 1800 feet to any party who will sink a shaft on the same sufficient to confirm its value, say 30 to 50 feet, or tunnel to same depth, and

Messrs. Banning, Keller, and Moore of Los Angeles are now opening 10 to 20 leads on those terms, and will soon ship the rock to Frisco to determine its value.

It seems to me that large quantities of rock can be got out here now, from croppings, which will pay a profit to ship, though the charges are about \$100 per ton.

C. W. T.

Silver Mountain, East Fork of Carson, }  
Amador Co., June 24, 1863. }

FRIEND SCIENTIFIC PRESS:—Believing that many of your readers will be interested (I know that some of them will) in matters pertaining to this region, I give you the following facts and speculations with regard to what must unquestionably prove, ere long, one of the best of all the new locations of the Eastern Slope.

Silver Mountain District is situated on Silver Creek, a tributary of the East Fork of the Carson River, some 2½ to three miles above the junction. Silver Creek has at the present time a volume of something like a thousand "streams," (12 inches to a stream) and I am told that it will be little if any less during the season: probably it is never smaller than one half that amount, and has such fall that I think a mill privilege can be located to average one in every 500 yards of its length. It flows a little on one side of the beautiful valley in which is situated the present town of The "Mountain," or as its earlier settlers call it, "Koningsburg."

The town contains some 300 inhabitants, is well supplied with stores; illy supplied with whisky shops (though there are many of them); has a 1st class frontier hotel, a good restaurant, besides several boarding places where a hungry man can get his regular hash, a bakery, livery stable, blacksmiths, shoemakers, one sawmill, another going up, and

## SOME OF THE MOST PROMISING MINES EVER FOUND.

The Mountain No. 1, just incorporated, is undoubtedly the Comstock Lode of this District, if indeed it is not, as some assert, a continuation of that great Mother vein itself. An old mountaineer and prospector tells us that he has traced it through the whole sixty miles that intersect between this point and Virginia City. Certainly, from specimens of rock in my possession, it can be seen that an intimate relationship exists between this and the original Gould & Curry, and a number of connoisseurs have also remarked this to me.

Mountain No. 1, is a claim of 2750 feet in length, well defined throughout its whole surface length, with at times, splendid outcroppings. It was discovered by a party of Scandinavians, by whom a tunnel was run in some 260 feet, which tunnel has struck the lode, here about 12 feet wide. Any quantity of rock can be obtained with small expense, which it is supposed will pay well for crushing.

The expense of transporting to a mill will be absolutely nothing as the ore can be thrown into a "shute" extending from the dump pile down some hundreds of feet to a magnificent mill privilege. Several well known capitalists are trying for this claim and a controlling interest must undoubtedly ere long change hands, as it can be obtained at very reasonable figures, its principal owners knowing well its great value, but willing to sacrifice something to expedite the erection of a fine mill.

Northward of the "Mountain" Co. are the Mammoth, Silver Prize, and St. Charles, on all of which work has been or is being done. Southward, the 1st Extension is the Jefferson Co., who have run a 30 feet tunnel and have up a notice of another contract to let. Above the Mountain some hundreds of feet is the "Big Tree Company." They have a splendid outcrop, and have let a contract for 50 feet of tunnel which will probably strike their ledge, which they will get into about the middle of August at farthest, judging from the energy of the Contractors.

And here let me digress for a moment from leads to speak of the needs of the District and the chances for laboring men. There is an abundance of work for 1000 men in Silver Mountain alone. During 24 hours of my sojourn here, over eleven thousand dollars (so I am informed) has been pledged to build the road in from Hermit Valley to this great point. This will require the labor of some seventy-five or one hundred men for sixty days time. Nearly or quite that number are now employed on that part of the route between Hermit Valley and Big Meadows, (31 miles this

side Murphys) and when the road is complete from Murphy's to Silver Mountain, (only 56 miles) there will be money subscribed very soon to carry it to the East Carson, down through the Monitor, Alpine and Mogul District to Washoe, by all odds the nearest, best and pleasantest route, passing through as it does some of the most picturesque and grandly sublime mountain scenery on the globe. There are in this District probably 80 tunnels being run or shafts sunk. Laboring men get by the day \$4, but the most of the work is being done under contract, at from \$12½ to \$30 per foot, at which good drifters commonly make much more than day wages, even to as high as \$20 per day to the man. More tunnels would be commenced, more work would be done, if there were more workers to do it, and what better field presents itself to laboring men, considering in connection with the chance for gain, the absolute healthfulness of the location and the certainty of his getting his pay?

Next to the great need of labor is the need of roads, but this in some measure depends on the former, and the parties now in charge of the undertaking, will unquestionably find means to get their highway open early in September, so that, instead of as now, long lines of laboring pack-mules, the long line of mule teams will with their jingle of bells make "Babel" in the streets of Koningsburg. More anon  
P.

## SPECIAL NOTICE.

Some weeks since we forwarded blank receipts to such of our subscribers as are in arrears for their subscriptions. Some have promptly answered by remittances of the amounts due others have notified us of special contracts with our predecessor, or of full payments made to him and not credited on our books. Where payments have thus been made, we have in every instance, allowed them. There are quite a number, however, who have returned no reply to the bills which have been sent out. We trust all such will respond immediately upon seeing this notice. If payments have been made, we wish to be notified of the fact, so that due credit can be given; and if there are any to whom the paper is now sent who do not wish to continue it or do not intend to pay their subscription, we hope they will notify us of the fact so that we may discontinue sending papers to them. We do not wish to crowd the paper upon any man. All the names upon our list have been placed there, as subscribers, upon what we have deemed good authority. If any party, not considering himself a subscriber and in arrears, has received a bill for subscription, he will confer a favor by notifying us immediately of the fact. Postmasters are also reminded of their duty to return a paper that is not called for, etc.

NOTICE.—In our advertising columns, will be found the card of BRODIE & Co., California Foundry, Fremont St near Market. In their particular line of business, making plain and ornamental castings, for stores, private-house and public works, they exhibit workmanship creditable to themselves and the city.

WE would call attention to the Card of D. MORRIS in our Advertising columns to-day. Those wanting Fire proof Safes made or repaired, will not find a better workman in town, than Mr. Morris, 227 Market Street, corner Beale.

EXCELSIOR IRON WORKS.—The Card of Gallagher Kenney, Manufacturers of Architectural and Ornament Iron Works, will be found among our new Advertisement to-day. These gentlemen are prepared to execute every kind of work in their line, with dispatch, and in a style to be excelled by any other Manufacturers.

We would call attention to the Card of H. C. KIEBE, Esq Mining Secretary and Commissioner for Nevada Territory which will be found in our advertising columns to-day. A business entrusted to his care will be promptly attended

KAMPTULICAN.—Lieut. G. Walton, of the British Navy has proposed a mixture of sawdust and caoutchouc under the name of kamptulican, as a lining for iron war vessels. The inventor claims that from its elasticity, it will immediately collapse when penetrated by a ball, and thus prevent the entrance of water. It also deadens concussion, and its buoyancy will keep a vessel afloat though it should be riddled with shot, and moreover will prevent loss of life caused by splinters. [The Cornplanter and Mechanic.



## COPPER MINING.

The Mining Era of that section, throwing out of view the ancient workings, of which we know but little, commenced about the year 1844. The wonderful reports brought from there, and based too upon the explorations of men of undoubted veracity and well known scientific attainments, produced a fever of excitement which resulted in the rush thither of large numbers of adventurers and capitalists; and Companies were formed by hundreds, to work the various localities, all of which, it was thought, *when they got deep enough* would ensure fortunes to the adventurers. A period of some three years was occupied in thus locating and prospecting. We have no means of knowing how many Companies were organized; but they were numbered by scores, not by hundreds. At last, however, the inevitable crisis came, and at the close of 1847 only *six* Companies, out of the entire number, were found actually engaged in mining. Of course, a great distrust in the entire locality was at first superinduced, which gradually, however, gave way before the convincing proofs adduced by the few genuine operations which survived the crash, that there was a value in judiciously located mines. The revulsion was finally beneficial in exposing the spurious and worthless schemes, and bringing into especial notice those of actual worth. Since that period the mining progress of that region has been steady and legitimate until, at the present time, it is producing not far from one seventh of the entire copper product of the world.

We fear, from present indications, that Copper mining, in this State may have to undergo a similar ordeal. We deem it a matter almost incredible that more than a mere tithe of the Companies now organized, and in immediate prospect can hope to become dividend paying institutions, ; and it may not be amiss to throw out a hint in season, that our people should be cautious in their investments in "copper feet," and not be too hasty to place high valuations upon undeveloped mines.

It should be born in mind that all past experience goes to show that but a small proportion of even quite promising surface indications are developed into permanent, dividend paying mines. Many, even, that will afford a good business to actual working proprietors, will never become valuable as dividend paying investments. There need be no fear, however, from developments already made, but that California will eventually abound in rich mines of copper, as well as of gold and silver; but all, cannot be rich. Although copper mining is more reliable than mining for gold, still our experience in the latter should warn us to beware lest we promise ourselves, too much from superficial indications. We would by no means seek to discourage the prospector; we simply suggest that he who buys feet for investment should beware of buying at fancy prices upon mere surface or shallow indications. A copper mine, producing shipping ore in fair quantities, is undoubtedly valuable property, but the number that will become such in this State, is much smaller we imagine, than most people, under the present excitement, are willing to admit.

THE Humboldt Register says: "With all the flood of immigration, workmen are wanted still. Companies are advertising for proposals to do work—for cash; but half the time no bids are put in. Notices are put up, inquiring for workmen to take foremanship of work on ledges, at good cash prices—\$4 to \$5 a day.

[illegible]



## COPPER—ITS PRODUCTION AND DEMAND.

Copper is one of the six metals spoken of in the Old Testament, and one of the most important of the seven which were known to the ancients. The earliest artificer known in history, Tubal Cain, according to the writer of Genesis, was a worker in "brass," which is an alloy of copper. This testimony of the Sacred Writ is somewhat conflicting with the text of the ancient Greek Historians, who attribute the discovery of copper to Cadmus, who lived contemporary with Joshua. Whether the discovery of copper should date from the days of Tubal Cain or Cadmus, there is certainly abundant testimony that it is at least one of the earliest known metals. Aside from its mention in the most ancient records, it is readily supposable from the nature and mode of its occurrence, that it must early have come into use for weapons of defence and utensils of industry. Occurring as it frequently does, massive and native, and often detached, by water, from its original matrix, it is most reasonable to suppose that it must have thus been found at an early day, in localities where warlike people resorted to seek stones with which to shape their instruments of war, or out of which to form those instruments. The peculiar lustre, weight, and malleability of this metal would naturally attract attention, and thus, it is more than probable, that copper was the first metal upon which were essayed the earliest attempts at primeval smithery. Perhaps we might, with a high degree of probability, divide the honors with the ante and the post-diluvian celebrities, by according to Tubal, or his ancestors, the discovery of the native metal, while his post-diluvian rival in the honors of discovery might have taught mankind how to obtain metal from its ores.

Copper, either of itself or in its alloy with tin and zinc, for a long period of time, doubtless, constituted the chief metal employed in the arts, agriculture and war. It must have entered largely into commerce at an early day. The Colossus of Rhodes, which was constructed of an alloy of this metal, affords a most convincing proof of its great abundance at that time. It is stated that the canal which was dug across the Isthmus of Suez, by the Ancient Egyptians, the remains of which have been unearthed, in places, by the present effort, in that direction, by Louis Napoleon, was constructed chiefly for the purpose of connecting the copper producing countries of Arabia with the region of the Nile—another evidence of the great abundance of this metal at an early day.

The remains of ancient copper mines are to be seen, at this day, among the Ural Mountains, which were worked by copper tools, as is known from their remains, and of course at a period anterior to the introduction of iron for the manufacture of tools.

It is only, however, since 1830 that copper has been produced in anything like its present abundance. In that year the total amount of copper produced throughout the world was but 25,500 tons; in 1840 the amount produced was 41,000—nearly doubling in ten years—in 1850, the production had reached 54,700 tons. The product of 1860 is estimated, by competent judges, at 70,000 tons. Yet, rapid as has been the increase within the last thirty years, the price of that metal has risen very notably.

When the world was startled by the first reports of the wonderful gold discoveries in California, the opinion seemed to be pretty generally entertained that, under such prodigious supplies of the precious metal, its value must depreciate. The same question again agitated the commercial world when the extent and magnitude of the remarkable silver discoveries of Washoe became fully known. Notwithstanding the fact that gold and silver still maintain their value and promise to do so to an indefinite future, we yet find a similar class of predictions in regard to the supposed consequences to result from the immense prospective increase of copper from the newly discovered mines of this State.

In examining this question briefly it may not be amiss to look a little into the past. As will be noticed from what we have already said, the history of copper mining has commenced a new and important era within the last twenty-five years. During that time its production has fully doubled, and yet we find the refined metal (though subject to considerable fluctuations) constantly increasing in price. By reference to English statistics we gather the following facts in reference to the amount of copper ore sold in England

		and the price of the refined metal, in the British Market:	
	tons of ore sold	\$586 price per ton	
1800	55,681	661	" "
1810	66,048	596	" "
1820	92,672	531	" "
1830	135,665	531	" "
1835	163,607	542	" "
1840	147,266	516	" "
1845	157,000	520	" "
1850	150,890	531	" "
1952	152,802	700	" "
1854	190,687	665	" "
1856	206,177	657	" "
1858	182,391	666	" "
1859	183,944		

From the above it will be perceived that notwithstanding the constantly increased production of copper in Great Britain the price of that metal has advanced fully fifteen per cent. since the commencement of the present century.

Again, let us refer to statistics of our own country. The yield of the copper mines of the United States and Canada for the year 1840, was but 100 tons; we have no data for fixing the value of the metal other than by the ruling price in Great Britain, which was \$542 per ton. In 1850 the yield of our mines had increased to 650 tons, and the price of copper in New York was \$420. We subjoin a tabular statement, derived from the best authorities, of the value of copper in the New York Market from 1850 to the present time, together with the production of that metal in the United States for the years 1852, '53 '57, '61, and an estimate for the present year:

Year.	Market Value per Ton.	Tons Produced.
1850	\$420	650
1851	425	...
1852	425	...
1853	583	2,000
1854	546	...
1855	567	...
1856	535	...
1857	260	3,000
1858	463	...
1859	460	...
1860	441	...
1861	425	7,500
1862	567	...
1863	690	12,000

It will be observed, from the above, that the advance in the price of copper in the United States has fully kept pace with the advance in the English Market.

The annual consumption of copper in England, at this time, is about 30,000 tons, about one third of which is obtained from her own mines. Germany consumes about 20,000 and France about 15,000 tons of copper annually. The consumption of the United States for the present year is estimated at 15,000 tons, and that too, in face of a most unprecedented advance in price, while our production of that metal is estimated at only 12,000.

The recent discoveries in this State will doubtless exert considerable influence upon the copper market, when the mines come to be thoroughly opened. But the effect produced will not be of greater value than the fluctuations noted above, in both our own and the English Market. The constantly increasing demands of commerce, and the innumerable purposes in which copper may be employed as an alloy, provided but a small reduction only, in price is effected, will so increase the demand for this metal that our copper miners need feel no uneasiness least their stalwart arms or rich ore producing mines shall so glut the market of this metal, as to bring its price down to an unprofitable standard. Let our copper mines prove as rich and productive as the most sanguine may hope for, a mine producing shipping ore of a fair quality and in good quantity cannot fail to become a most valuable property, and as safe an investment as can be found in any branch of business.

✂ We are receiving letters almost every day from parties who say that they have "struck it rich," and by the aid of knowledge derived from articles in the MINING AND SCIENTIFIC PRESS, have been enabled to distinguish what was valuable. One correspondent writes that he was led to examine certain rock, by reading an article in the PRESS describing ore, and found it to be very rich ore. Had not his attention thus been especially directed to it, he would in all probability, have passed it over in utter ignorance of its value. Another says, "I was first led to notice copper rock by articles in your paper, called the 'Miners' Laboratory,'

and found it to be a rich lead, but, what is strange, I had previously walked over the spot a thousand times without suspecting it to be of any value."

It is a source of no small congratulation with us to learn from the miners themselves that we are making the paper valuable to them as a class. All the return we ask is that our mining readers will do what they can to aid us in giving the PRESS the largest amount of circulation possible throughout the mines, as well as in the great commercial cities of the State.

## A VERITABLE GOLD MINE IN SAN FRANCISCO.

For several years past it has, from time to time, been announced that gold bearing, and other metalliferous rock has been discovered in and near this city. That such rock has been found, as isolated specimens, or in very small quantities, is beyond a doubt. But we opine that it is only within a few days, or weeks at most, that gold bearing rock has been discovered in any considerable quantity. It appears now, however, a pretty well authenticated fact, that an immense mass of auriferous quartz, of a highly metamorphic character, has been protruded upward through the bed of slate upon which this section of country rests. How extensive this protrusion may be we cannot say; but at all events the high ridge, just back of the Mission Dolores, with the two rocky prominences nearest that location are capped, if not ribbed, with an immense mass of porphyritic quartz, in a highly metamorphosed condition, and presenting to the eye of the practiced miner, strong auriferous indications. We are assured furthermore, by parties in whom we have every reason to place confidence, that gold can be obtained, by ordinary pounding of the debris of the rock, to all appearance in workable quantities, over an extent of country from one to two miles in length, by from fifty to five hundred feet in breadth. Millions of tons of this rock crop out upon the surface, in some places presenting almost perpendicular masses, and scores of feet in extent and height. Some eight or ten Companies have already been organized, and active preparations are in progress for thoroughly testing the value of this discovery. One Company has had several lots of rock crushed in the city and subjected to the panning and amalgamating process at the Miners' Foundry, with results varying from \$25 @ \$70 per ton. We have seen one lot of amalgam, weighing six ounces, taken from 1000 lbs. of ore which was still undergoing a further process of treatment. This rock was taken from the surface, with even the moss clinging to it, and thousands of tons more of precisely similar rock is in plain view—in fact a perfect mountain of it! The owners of this claim purchase their title from a Spanish Grant, before the knowledge of the existence of the gold became known, paying therefor \$30,000. A large number of claims have been staked off.

OLD DR. BEECHER'S IDEA OF HEAVEN.—"Excepting exception from sin, intense, vigorous, untiring action is the greatest pleasure of mind. I could hardly wish to enter Heaven did I believe its inhabitants were idly to sit by purling streams, fanned by balmy airs. Heaven, to be a place of happiness, must be a place of activity. Has the far-reaching mind of Newton ceased its profound investigation? Has David hung up his harp as useless as the dusty arms in Westminster Abby? Has Paul, glowing with God-like enthusiasm, ceased itinerating the universe of God? Are Peter and Ayperian and Edwards and Payson and Evans idling away eternity in mere psalm-singing? Heaven is a place of restless activity, the abode of never-tiring thought. David and Isaiah will sweep nobler and loftier strains in eternity, and the minds of saints, unclogged by cumbersome clay, will forever feast on the banquet of rich and glorious thought. My young friends, go on then; you will never get through. An eternity of untiring action is before you, and the universe of thought is your field."

NEW WEAPON.—The manufacturers of Sharp's breach-loading pistol have produced a new weapon, which though weighing but 24 ounces, is capable of bringing down a squirrel or a bird at a thousand yards distance.

THE "NO CARDS" MANIA.—The no cards mania is extending. The Canada papers attach "no cards issued" to their funeral as well as their marriage notices.



## THE MINING SHARE MARKET.

The Mining Stock Market for the past week has been inactive, especially in leading shares. The transactions have been mostly of a speculative character and in middle class stocks.

The Gould & Curry has declined a shade further and may now be quoted at \$5,500.

Ophir is held firmly at previous rates. A dividend of \$48 per foot was declared on the 9th instant.

Savage maintains last quotations. It closed at \$3,500.

Chollar is firm at a slight advance. A large quantity of ore from this mine is now being crushed, the result of which is anxiously looked for.

Sacramento has advanced about \$20, upon rumors of a compromise with the Meredith.

Considerable speculation has been noticed in the Pride of the West and Buckeye, both of Devil's Gate District, each of which is beginning to attract attention by reason of favorable developments at the mines. The shares of these Companies have advanced about \$50 to the foot, during the past week.

Wide West has been quite largely dealt in at improved, though fluctuating rates. It has been the favorite of the week, 342 feet having changed hands at \$160 @ \$200.

An increased attention is being given to Humboldt shares. It has been quite largely dealt in; 136 feet having changed hands the past week at rates varying from \$400 @ \$450. A quantity of ore from this mine, is now on its way to Freiberg, where it will be worked after the most approved German process, as a reliable test of the value of the mine.

The chief exciting mining topic of the week has been the abortive attempt to dispossess the present occupants of the Amaden Quicksilver Mine, by virtue of an obsolete Congressional Act of 1807. Fortunately for the State and country the attempt was foiled by a brief telegraphic correspondence with the President, who has stayed all immediate action in the matter.

Another matter of nearly equal interest, is the announcement of the transfer of the Mariposa Estate to a mammoth New York Company, who have organized with an issue of Shares representing Ten Millions of Dollars. The new Company assumes all existing liabilities of the Estate.

## THE COPPER INTEREST.

Copper still continues to absorb much interest, and the reports from the mines are quite as encouraging as heretofore. We have elsewhere thrown out a few hints which it may be well for all parties to bear in mind. An undue excitement will result in no general advantage, but may lead to much individual disaster.

A correspondent writes: "At Salt Springs, to the northward of Copperopolis, the D'Jue Company are taking out large quantities of black sulphurets of copper from a vein seven feet in width. One interest of 200 feet in this mine has been sold for \$4,000, within ten days. The New Era Company who hold the extension on each side of the D'Jue, are sinking on their South claim, and at a depth of about sixty feet have struck the same indications. Negotiations are now pending for the purchase of their North claim by the agent of some Parisian capitalists who have recently arrived here. The D'Jue and New York Co's expect soon to have ore on hand for shipment."

In Plumas and Placer Counties, a like excitement exists, and shafts are being sunk and tunnels run with some prospect of success.

There are now numerous buyers of copper ore in the market, deliverable in this city, for shipment East. The California Smelting Co. are also buying for their works at Antioch.

The Union, so far, is the only dividend-paying copper mine.

The Oriental has sufficient ore on the surface to pay all expenses to date, and leave a surplus. They will soon commence shipping. Several Companies will soon commence paying dividends.

## GENERAL MINING STOCK REPORT.

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending July 11, 1863.

Names of Companies.	Total No. Shrs.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2450	2400	2500	2420	2430	—
Gould & Curry	4,800	4	500	5000	5000	5000	5000	5450	5350
Central	1,500	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	5,000	5	100	900	900	925	940	880	—
Potosi	2,800	1	500	600	660	650	—	650	—
Hale & Norcross	8 00	500	1200	—	1600	1850	—	1850	—
Sierra Nevada	3,000	1	600	55	50	55	62 1/2	62 1/2	62
Danby	4,800	4	600	290	290	290	280	275	265
Burning Moscow	8,000	100	140	120	120	120	120	120	120
North Pole	2,000	1	300	60	52 1/2	50	50	—	—
Rogers, F. D.	3,000	1	250	—	—	—	—	—	—
Berkeley	7,200	1	125	60	62 1/2	68	68	60	52 1/2
Charles Canby	1,500	1	30	—	—	—	—	—	82 1/2
Sacramento	1,800	1	500	115	115	100	100	100	80
Lucerne	1,800	1	600	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	3200	—	3100	3400	3400	3300
Iowa	—	—	—	135	132	132 1/2	122 1/2	115	—
El Dorado	—	—	—	77 1/2	80	80	75	75	—
Norton	1,600	1	—	10	7 1/2	8 1/2	9	8	4 1/2
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Baruside	—	—	—	18	18	17	—	18	15
Adiratic	—	—	—	—	3	3	3	—	3
Brentus	—	—	—	—	—	—	—	—	—
Count Hill Tunnel	10,000	1	100	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Mount Davidson	10,000	1	200	—	2 1/2	2 1/2	2	2 1/2	2 1/2
Pride of the West	—	—	—	90	90	100	110	150	132
G. H. Quanz M. Co.	—	—	—	—	—	—	—	—	—
Imperial	—	—	—	400	440	—	—	430	435
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	1	600	161	180	180	167 1/2	167	166
Autolope	1,200	1	500	190	—	20	—	18	—
Emeralda	1,600	1	1000	—	—	—	—	—	—
Rail Del Monte	4,400	1	400	100	200	210	215	210	200
Etna	1,200	1	100	—	—	—	—	—	—
Utah	1,600	1	250	65	65	71	67 1/2	70	65
Silver Hill	3,000	1	500	33	—	—	34	34	35
Nevada	1,200	1	250	15	20	20	—	—	20
Federal Hope	—	—	—	5c	21c	15c	25c	—	—
South Utah	—	—	—	—	—	—	—	—	—
Jeany Lund	—	—	—	—	—	—	—	—	—
Falls of Clyde	—	—	—	6	4	5	7	—	4
Union	—	—	—	—	—	—	—	—	—
Sanborn, s. w. ex.	—	—	—	—	—	—	—	—	—
Bamboo	600	1	500	—	—	—	—	47 1/2	—
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	9	9	8 1/2	8 1/2	8 1/2	9 1/2
Coso	3,600	1	800	—	—	—	—	—	—
Wilkes Springs	2,700	1	100	3 1/2	3	4	—	8 1/2	—
Empire	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	1	1000	—	—	—	—	—	—
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	—	—	80	—	60	62 1/2
Josephine	—	—	—	—	—	—	—	—	—
<b>CATALINA STOCKS.</b>									
Laurel Hill	—	—	—	2 1/2	2 1/2	2 1/2	2	2	2
Utica	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	—	—	—	—	—	—

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, July 9, 1863.

Virginia Mining District.	Bid.	Ask'd	Sierra Nevada	Bid	Ask'd
Ashland	\$ 9	10	Sacramento	80	90
Albion	50	90	Shamrock	—	15
Atchison	150	—	Texas	—	—
Alturas	3	5	Union	—	100
Belvidere	25	30	U. S. Tunnel	4	5
Birdsall	20	25	Utah	75	100
Bajazet and Golden Era	36	50	Old Virginia	250	—
Burns	18	20	Washington	5	—
Burning Moscow	150	160	Yorba	8	—
Beach-Paxton	95	125	Zouave	17	20
Bloomington	4	5			
C. Cress (Buchanan)	—	250	<b>Gold Hill District.</b>		
Cedar Hill Tunnel	—	5	Alpha	500	750
Cole	8	14	Baltic	16	20
Commercial	15	20	Bullion	90	100
Consolidated Cedar Hill	3	3 1/2	Becher	1200	1400
Durgan	8	5	Branch Mint	7	—
Empire	—	6	Caledonia	50	65
El Dorado	80	90	Coppers	25	—
Fairview	200	225	Eureka	15	20
Grass Valley	80	100	Forcade & Rieard	6	8
Hazel Green	—	7	Gold Hill, Big Lodge	50	60
Harrison, Virginia City	18	25	Golden Gate	12	15
Harrison San. Fran. Incor.	—	5	Golden Eagle (No. 1)	12	15
Irving	—	10	Hawkeye	20	25
Insurance	30	35	Hudson	200	250
Iowa	115	120	Koh-i-noor	—	—
Iroquois	5	6	Leon	65	80
Indus	10	12	Laboring	12	15
Juanita	—	10	Lucerne	18	—
Keystone	25	30	Mary Ann	50	60
Kenosha	6	10	North American	70	80
La Crosse	9	10	North Ophir	10	—
Lancer	10	12	Overman	200	—
Monte Cristo	25	30	Oriental	5	—
Meredith	45	60	Omaha	500	—
St. Davidson	15	20	Princess	112	125
Massillon	10	12	Standard	15	20
McBee	25	30	Swozy	7	—
Milton	100	120	Stephenson-Kehoe	8	9
Monarch	72	80	Union	40	45
Madison	24	30	Yellow Jacket	1500	1600
Mohogau	10	12	Ulele Sam	2	5
Norton	15	20	Yolo	10	—
Oakland	12	15			
Oriental	3 1/2	5	<b>Devil's Gate District.</b>		
Oscola	12	15	Governor Nye	10	15
			Rawley	30	—

Pride of Washoe	10	Monterey	7
Pyron	28	Pride of the West	145
Portman	30	Widened	6
Perseverance	40	Wide West	12
Rogers	70		15
Reorder	8	<b>Flowery District.</b>	
Santa Rita	35	Atwill	—
Santa Fe	36	Adriatic	3
Sutro	9	Lady Bryan	7
St. George	10	Harrison	6
		Uncle Sam	6

## ESMERALDA STOCK LIST.

Our usual Esmeralda letter having failed to come to hand, we continue our last week's quotations.

[Corrected for the Mining and Scientific Press, July 2, 1862.]

	Bid.	Ask'd		Bid	Ask'd
Alpine	24	10	Koeney	20	—
Amador	5	5	Lave Yankoe	—	20
Atlantic	5	—	Lord Byron	7	12
Antelope	200	—	La Placer	7 1/2	12
Alturas	15	20	Main Branch	—	40
Etna	15	—	Monroe	—	—
Brazo	15	20	Mckinstry Tunnel Co.	5	—
Rodie Bluff Consolidation	8	—	Mount Christo, Tunnel co.	—	40
Bodie Peak, Bodie District	8	—	Mutual	—	10
Bright Star	10	15	Mount Halsey	—	10
Bamboo, Excelsior Dis.	60	—	Mary L. Gardner	—	—
Bodie Bluff, No. 1	12	15	Meredith	4	6
Bodie Bluff, No. 2	5	—	New Willow Springs	—	30
Bunker Hill	10	15	New Esmeralda Consol.	—	6
Bonaparte, Tunnel comp.	5	—	Newton	50	—
Canaan	25	—	Nevada, (Tunnel)	—	15
Crocker	65	100	Ozark	—	20
Cape	5	—	Old Wadsworth	—	6
Clan Alpine	12	20	Paul Tunnel Co.	—	5
Davis, consolidation	5	—	Pacific	20	—
Darguin	9	—	Pond	—	—
Delta	8	—	Pride of Antelope	10	15
East Essex Ex. Ural	12	—	Peru (two ft. to the share)	—	15
Excelsior, Excelsior Dis.	10	20	Pennsylvania Tunnel Co.	0	10
Empire	28	—	Real Del Monte	—	20
Franklin, Tunnel company	10	—	Rebecca	—	20
Fallstaff	20	—	Rod, White & Blue	—	20
Fallstaff, Consolidation	4	5	Stanford Tunnel Co.	—	15
Fresno	9	12	Schenectady	7	10
Falls of Clyde	10	20	Shawberry	20	—
General Hooker (Con.)	14	25	Silver Hill	34	—
General Jackson	13 1/2	14	Silver Hill, Bodie District	—	7
Gambaldi	30	—	Seymour	25	—
Golden Harvest	5	—	St. Louis	—	5
Golden Cross	15	20	Tuscan	3	—
Governor Seymour	25	—	Tiger	4	—
Golden Age	40	—	Tucker	—	15
Golden Era	6	9	Tennessee	12	25
"Golden Era" Tunnel Co.	2	3	Union Tunnel	20	30
Greenback	20	35	Utah	—	150
Hanover	10	—	Ural prot. British	—	—
Howard Tunnel Co.	6	15	Ural (extension)	—	10
Heath	12	15	William Tell	—	2 1/2
Herman Check	—	15	Wide West	—	—
Home Check, Excelsior Dis	5	6	Washington, Tunnel comp.	4	—
Juana	10	18	Western Summit	—	100
			X-Elna and Constantinople	—	—
			Yanery	45	60
			Cortea, consolidated	—	30

## THEATRICAL.

McGuire's Opera House, the present week, has been occupied, up to Thursday night, with "Lady Audley's Secret," a dramatised version of Miss Brandon's novel, by Miss Western. No piece, in our opinion, has been presented to the public, more deserving of the patronage it has received. It is, throughout, artistic, harmonious and truthful. The performance has been highly meritorious.

On Friday a new piece, called the "Declaration of Independence of 1776," by Mr. Howe, a well known resident of this city, was presented. From an omission of the usual compliments, we are not at present able to report upon its merits.

THE EUREKA.—The Minstrels, this week have given their usual amount of fun, and received in return a corresponding amount of patronage. Two new pieces of interest have been presented. The one a song by a member of the Fire Brigade, in answer to the popular



## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been spent upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

### METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the severest of all test—that of constant use—and in every case has been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1860, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes with four and five Stamps, etc. The Four Stamp Battery weighs, when complete, about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed, when desired, is cast in sections, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

### MANUFACTURED ONLY BY

**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

on 125 to 136 First street, and 126 to 144

Fremont street.

P. DONAHUE. H. J. BOOTH. C. S. HIGGINS.

## UNION IRON AND BRASS FOUNDRY.

(The First Established in the State.)

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

**HAVING ADDED TO THE SEVERAL** Departments all the recently improved Tools, this Establishment is now the most Extensive and Complete of any on the Pacific Coast.

The undersigned are prepared to furnish, at short notice, Locomotive, Marine and Stationary Engines, of every size and description.

### BOILERS.

Locomotive, Flue, Tubular, Upright and Cylinder, furnished with or without engines, complete. Machinery and Castings of every description, Saw-mills, Grist Mills, Car Wheels, Derrick Irons, etc.

**QUARTZ CRUSHING BATTERIES,** Embracing a great variety of Stamp, Mortar and Cam Patterns.

**AMALGAMATING MACHINERY,** Varney's Improved Patent Pans and Settlers, Wakely Pans, Amalgamating Tubs, Plated's Grinders, Chile Mills, Concentrators, etc., etc.

### MINING PUMPS.

Cornish, Lift and Force Pumps, from four to eight feet stroke, with Pipes, Bob Mountings, and Gearing complete.

### HOISTING DRUMS.

For Shafts or Inclines, with clutch, friction or V cone S Sole Agents and Manufacturers for the Pacific Coast, O. C. and G. M. Woodward's Celebrated Patent Steam Pumps and Fire Engines.

All Contracts and Orders executed with promptness and dispatch, and at reduced prices for Cash.

je21 DONAHUE, BOOTH, & CO.

### Giffards Injectors,

**FOR SUPPLYING BOILERS WITH FEED WATER** without Pumps. No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODART, Agent.  
je22 Cor. Pine and Front Sts., San Francisco.

### I. C. E. KLEPZIG & CO.,

## GUN MAKERS,

### DEALERS IN GUN MATERIALS,

733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Ekland. je21

### CORNELL'S

## EXCELSIOR GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the undersigned is now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As I have every facility for producing these beautiful pictures, in all their different varieties, I have reduced the price to

**\$3 PER DOZEN AND \$2 PER HALF DOZEN!**

Large size Photographs. \$3—Extra copies \$1 each.

AMBIOTYPES in All Styles and Prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist.  
je22 R. H. CORNELL.

## BAUNCHEIDTISM,

THE PRESERVER AND PRODUCER OF LIFE.

**THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF** curing disease, is a "fait accompli" in medicine, and needs no more proof. The public has crowned Bauncheidtism already with an extraordinary patronage, and it is acknowledged by all men of science that BAUNCHEIDTISM is founded on a rational, scientific basis.

It can safely, and with sure success be applied to paralysis in consequence of Apoplexy, Podagra and Rheumatism of every description, which kind of complaints can find their only relief by the above method.

Especially can it be applied successfully, in the spring of the year to diseases of the eye.

Dr. Borchers is the only doctor in California who has the original series of Dr. BAUNCHEIDT and his original oil. Dr. Borchers is also in possession of original letters of the inventor of the method by which he can prove that he is perfect master of the latter.

DR. J. C. BORCHERS.

No. 19 Kearney street, and No. 4, Mark's Place, First story, No. 5. Office hours from 9 to 11 A. M., and 1 to 4, and 7 to 9 P. M. je21

## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

### FOR PANAMA.

The following Steamships will be dispatched in the month of May, 1863.

July 3d, - - - - Stermer Golden Age

July 13th, - - - - Steamer St. Louis

July 23d, - - - - Steamer Constitution

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.  
je4 Corner of Sacramento and Leidesdorff sts.

## WHEELER'S

### Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to flow the triturating loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated on the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
2016-1f ZENAS WHEELER.

## A. ROMAN & Co.,

WHOLESALE AND RETAIL

### Book Establishment,

417 and 419 Montgomery street,  
SAN FRANCISCO.

Orders respectfully solicited and promptly attended to. A Treatise on Metallurgy, Comprising Mining and General and Particular Metallurgical Operations, etc. Etc. By Frederick Overman.

A Manual of Metallurgy, or A Practical Treatise on the Chemistry of Metals. Records of Mining and Metallurgy, or Facts and Memoranda for the Use of the Mine Agent and Smelter. By James Phillips and John Darlington. Manual of Metallurgy, more particularly of the precious metals; but including such others as are employed in dental practice.

Piggott on the Chemistry and Mining of Copper. Practical Mineral Assaying and Mining. Overman. Gold Mining and Assaying, by Phillips. Miners' Companion and Guide, compiled by Silversmith. Assayers' Guide, or Practical directions to Assayers, Miners and Smelters.

Practical Assaying, by Michell. Liver Ores and Silver Mines, by Pro. Blake. Ure's Dictionary of Arts, Manufactures and Mines. Weisbach's Mechanics of Machinery and Engineering. Nevill's Hydraulic Formula Tables. Fresenius' Chemical Analysis.

Together with many other works in this and similar lines

Books imported to order on short notice. A. ROMAN & Co.  
417 & 419 Montgomery Street.

## P. M. STEAMSHIP COMPANY.

### NOTICE.

Until further notice, the Steamers of Pacific Mail Steamship Company will hereafter be dispatched on the

3d, 13th and 23d of each month.

When any of the above dates fall on Sunday, the steamer will be dispatched on the following Monday.  
A. B. FORBES, Agent.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

### Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

## REYNOLDS'

### Patent Cut-Off and Governor FOR STEAM ENGINES.

127 of these Invaluable Machines,

### ARE NOW IN USE

In California and Nevada Territory, giving a perfect regular motion and Saving 20 to 65 per cent of the Fuel.

### Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to adjust least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street San Francisco.

### Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chinney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to pound, on the square inch. It CANNOT get out of order and any person can put one up in an hour after the danger is put in.

### Ingersolls Patent Drill Press,

With which drilling can be done the same as with the common ratchet, and when small holes are wanted, can be done four times as fast. The handle can be worked in any direction.

### Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.

### Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the low market rates.

### Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years.

Refer to—Sugar Refinery, San Francisco, Collett & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States.

E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

## MINING & SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equally in interest and valuable information to any paper published.

### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to its purpose, and of everything generally that may be of service to the Miner.

### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, also of receiving any information that may be necessary in obtaining his patent, the proprietors having had great experience as Patent Agents, together with facilities at Washington that enable them to obtain Patents with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its columns will from time to time contain original engravings of new machines and inventions, together with large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

### To Chemists, Architects and Millwrights

This Journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in the columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers—Four Dollars per annum. Club Rates.  
Five Copies for Six Months, \$5.  
Ten Copies for Six Months, \$10.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.  
For all clubs of Twenty and over, the yearly subscription is only \$2.80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

BOWER & SMITH, Publishers.  
Room 27, (formerly) U. S. Court Building, Corner Washington and Battery streets, San Francisco.



**DESKS**

AND

**Office Furniture,****FOR ALL KINDS.....FOR SALE BY****JOHN WIGMORE,****No. 423 CALIFORNIA ST., SAN FRANCISCO.**

OFFICE JOBBING, of all kinds, attended to.

**PALMER, HANSCOM & CO.,****GOLDEN STATE IRON WORKS,****No. 10, First Street, San Francisco,**

British Castings and Machinery of all kinds

ALSO:

**GENUINE WHITE IRON SHOES AND DISS.****PALMER, HANSCOMB & CO.****To Quartz Miners.****Knox's Improved****AMALGAMATING PAN,**

WITH

**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its use is introduced in the most effective and economical manner, while it is peculiarly adapted to the melting of floating gold and silver, known to be other as lost. Made exclusively by

**PALMER, HANSCOM & CO.,**  
GOLDEN STATE IRON WORKS,  
Nos. 10 & 21 First Street, San FranciscoThe public are informed that Letters Patent have been issued the undersigned upon Steam Chest Fake Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
**W. A. PALMER.****T. C. Sanborn & Co.****STOCK BROKERS,****No. 630, MONTGOMERY STREET.****PIER SILVER MINING STOCK,****GOULD & CURRY MINING STOCK,****CHOLLAR MINING STOCK,****CALIFORNIA STEAM NAVIGATION CO'S STOCK,****BOUGHT & SOLD.****DEETKEN'S****Chemical and Metallurgical Works,****On San Bruno Road, Islais Creek,**  
**SAN FRANCISCO.**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES. All the GOLD extracted by Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS. Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by all owners. No power nor clean water required for purpose.  
nov8-3m**LEWIS COFFEY AND RISDON,****STEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing Old Work, executed as ordered, and warranted as quality.

**Id Stand, corner Bush and Market Streets.**  
Opposite Oriental Hotel, San Francisco, Cal.  
**LEWIS COFFEY**  
**J. N. RISDON.****THEODOR KALLENBERG****Maker of Models****FOR INVENTORS.**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Lamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.  
**No. 4 Sansome street, corner Market,**  
San Francisco.**R. W. FISHBOURNE,****PRACTICAL LITHOLOGRAPHER,****ENGRAVER AND PRINTER,****No. 529 CLAY ST., CORNER OF LEIDSDORFF,**  
San Francisco. State and County Bonds, Stock Certificates, Bills of Exchange, Bills of Lading, Bank Checks, Landscapes, Architectural and Marine Views, Show Cards, Labels, Etc., executed with neatness and dispatch. N. B. All orders in Crayon Work promptly attended to.**MINING.**

N. B. Mining Stock Certificates executed with promptness and dispatch, and at greatly reduced rates. ly6

**MARTIN & Co.,****OFFICE--224 Montgomery Street, Up Stairs,****WILL CONTRACT FOR THE****Purchase of Copper Ores,**

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

**HENRY MARTIN,**

New York.

**J. F. GREENMAN,**

San Francisco.

San Francisco Post Office, Box 1259.

je 1.

**Tremont House,****418 and 420 . . . . Jackson Street,**

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

**The City Railroad Cars pass the Door.**

The House is conducted on Temperance Principles,

**WHICH SECURES TO OUR GUESTS QUIET.**

The prices for board and Rooms are very moderate—by the day, meal or week. We solicit a call from all.

**F. E. WEYGANT, Proprietor.**

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

**F. E. WEYGANT.****LEANDER RANSOM,****Civil Engineer**

AND

**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

**ALSO****STATE LOCATING AGENT.**

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL LANDS,****At the low price of \$1.25 per Acre.**Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct7-3m**Pacific Mail Steamship Company.****NOTICE.****ARRANGEMENTS HAVE BEEN MADE**  
by which shipments of**Gold, Silver and Copper Ores**

can be forwarded under through Bills of Lading from San Francisco to England, at reasonable rates. For further particulars apply to

**A. B. FORBES, Agent,**

28-4f Corner Sacramento and Leidsdorff street

**International Hotel,****JACKSON STREET, . . . . . SAN FRANCISCO**

[A few doors above Montgomery.]

**FIRE-PROOF BRICK BUILDING.**Most convenient to the Steamer's Landing, Business sts. & Places of Amusement  
**OPEN ALL NIGHT.****City Railroad Cars Pass the Door.****REDUCTION IN PRICES.**Fine Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and**BEST FURNISHED FAMILY ROOMS;**

and sets as good a TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

**F. E. WEYGANT, PROPRIETOR.****John R. Sims,**

Oregon street, between Washington and Davis and Fro and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and**

Shutters, Bank Vaults, Grating, Cemetery Railings. All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

**Mr. Sims Appreciates the Past**

liberal patronage of his friends, and trusts that he may continue to merit it in the future.

**For the Information of Strangers**

he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attest. A large assortment of second hand shutters for sale at low rates. ap13

**NATHANIEL GRAY,****General Furnishing Undertaker,****641 Sacramento st., Cor. of Webb,****SAN FRANCISCO.****FULTON FOUNDRY & IRON WORKS****HINCKLEY & CO.,**

MANUFACTURERS OF

**Steam Engines,****QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,****FIRST STREET,****BETWEEN MARKET AND MESSON.....SAN FRANCISCO.**

\* \* All kinds of IRON and BRASS CASTINGS furnished at short notice. Every style of Finishing to Iron when cast. Repairing of Machinery neatly done.

PATTERN MAKING in all its various forms. Prices low.  
**D. B. HINCKLEY. Wm. E. WORTH. Wm. A. FIELD.****W. T. & J. GARRATT,****City Brass and Bell Founders****Cor. First & Market sts., San Francisco.****BARRETT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garrett's Patent Improved Journal Metal."****SQUARZA'S PUNCH.****FIRST PREMIUM****AT THE SACRAMENTO AGRICULTURAL STATE FAIR**  
FOR 1862.**ALSO; FIRST PREMIUM****At the San Francisco Bay District Agricultural Fair, 1862****MANUFACTORY, WHOLESALE AND RETAIL,****No. 44 Leidsdorff street,**  
Opposite the What Cheer House, San Francisco.**To Mine Owners.****PARTIES having a Good silver Mine**  
and wishing for Machinery to work it for an interest in the Mine will do well to apply at this office. No organized company need apply.**50 lbs. MARINE and****Fire-Proof Paint,****MANUFACTURED BY THE PACIFIC METALLURGICAL** Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.**DIRECTIONS:**For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed oil.  
For Bottoms of Vessels, use one part ground sulphur three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:****HOUSE:**—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.**ROOF:**—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.  
**S. C. BRADSHAW, Agt.,****G. T. FOUQUE, Superintendent.****WORKS, North Beach; Office, 509 Sacramento st., San Francisco.****WRIGHT'S PICKS.****JOHN WRIGHT**, of Sacramento, has established himself in San Francisco for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. **JOHN WRIGHT, 511 Market street,**  
Opposite Battery, San Francisco.**REMOVAL.****OFFICE OF THE PACIFIC METALLURGICAL** Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

**COPPER OBES**—Highest market rates advanced in cash, for shipments. **S. C. BRADSHAW, Agent,**  
509 Sacramento street, near Sansome.**WANTED,****GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,**By **FRONTIER A. DEVIERCY,**

13 ap 487 Pine street, San Francisco.

**FREDERICK MANSELL,****MECHANICAL & ARCHITECTURAL****DRAUGHTSMAN,****No. 423 California street, corner of Leidsdorff.**

Drawings of Models made for parties applying for patents at Washington or London. mar23 2m

**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

**CROCKERY,****GLASS WARE,****FRENCH CHINA,****Coal Oil Lamps, Table Cutlery,****CLOCKS,****Silver Plated and Britannia Ware,****ETC., ETC., ETC.****NO. 516 SANSOME STREET,**

[CORNER OF MERCHANT.]

**SAN FRANCISCO.**



**H. C. KIBBE,**  
**MINING SECRETARY,**  
**Commissioner for Nevada Territory,**  
 542 Sacramento st., cor. Montgomery  
 (ARMORY HALL.)

**MYERS & DAGGETT'S**  
**Mining and Stock Exchange,**  
 No. 23½ B Street, Virginia City, N. T.  
*Mining Stocks of All Kinds Bought & Sold.*  
 Business connected with Mining Stocks of every description promptly and confidentially attended to  
 \* Abstracts of Titles Furnished, Etc.

**AGENCY**  
 For the Purchase and Sale of  
**MEXICAN MINING STOCKS**

At No. 411 Clay Street, San Francisco.  
**OFFICE OF THE PENA AND LA MARRONENA SILVER**  
 Mining Companies, San Antonio District, Lower  
 California.  
 All persons are invited to call and examine Ores from  
 the above mines.  
 je13 Wm. FAULKNER.

**SOUTH PARK**  
**Quartz Mill and Reduction Works,**

**GOLD AND SILVER ORES WORKED AT REASON-**  
 able rates, and Working Assays made of small  
 lots. All kinds of ores crushed at short notice.  
 J. H. SMITH & CO.  
 Office in Seidel's Block, opposite Masonic Temple.  
 je13 S. F. CLOUSER, Secretary.

**San Francisco Machine**  
 ....AND....  
**IRON WORKS!**  
 Northeast corner Fremont and Mission Streets.

**ALL KINDS OF MACHINERY MADE TO ORDER ON**  
 most reasonable terms.  
 Steam Engines, High and Low Pressure; Quartz  
 mills, Saw mills, mining Pumps, Hoisting machines for  
 mining purposes, Wine Presses, Agricultural implements  
 etc. etc. and Castings of all descriptions made to order.  
 Steam Engines exchanged and for sale by  
 DENNIS, DINSMORE & CO.  
 REPAIRING promptly attended to.  
**FOR SALE.**

One Upright Post Drill, Putnam's manufacture, Al-  
 so one thirty inch screw Chuck.  
 San Francisco, July, 1883. je13

**WILLIAM BRODIE & CO.,**  
**CALIFORNIA FOUNDRY,**  
 Fremont Street, near Market, San Francisco.

**Light and Heavy Castings,**  
 Of Every Description, Made to Order. Particular atten-  
 tion paid to all kinds of House Work, Plumb and Or-  
 namental. je13

**D. MORRIS,**  
**MACHINE SHOP,**  
 227 Market, corner of Beale Street.

Manufacturer of  
**WARRANTED FIRE-PROOF SAFES**  
 Mill Work, of all kinds made to order. All kinds of  
 Repairing done at moderate prices. je13

**EXCELSIOR IRON WORKS,**  
 713 Sansome street,  
 Between Sackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,**  
 Manufacturers of all kinds of  
**Architectural and Ornamental Iron Work,**  
 Bank and Store Vaults, Safes, Doors, Shutters, Bal-  
 cony, Area and Cemetery Railings, Gates, Stairs,  
 Etc. and all kinds of Blacksmithing and Job-  
 bing done with promptness, and at  
 Reasonable Prices.  
 Orders from the country promptly attended to.  
 je13

**To Mining Companies.**  
**FOR SALE—A STEAM ENGINE AND BOILER.** THE  
 Engine is 30 horse power—10 inch cylinder—24  
 inch stroke—solid iron frame, with heater, pumps, etc.,  
 all complete. The boiler has 5 flues, is 24 feet long, 40  
 inches in diameter, made up from the best three-eighths  
 inch Low Moor Iron, and weighs about 5000 pounds.  
 Both Engine and Boiler are in perfect order and fully  
 guaranteed. Apply to  
 I. H. HAM, No. 211 Clay St.  
 San Francisco, June 13, 1883. St

## APARTMENTS.

**FURNISHED APARTMENTS, WITH OR WITHOUT**  
 Board, at 1018 Powell Street, between Clay and  
 Washington Street. Persons desirous of a respectable  
 home will do well to apply. je6

**E. C. DAKE,**  
 DEALER IN  
**CLOTHING,**  
 AND  
**Gentlemen's Furnishing Goods;**  
 ALSO  
**HATS, CAPS, ETC.**  
 At THE NEW YORK CLOTHING STORE,  
 541 & 543 Washington st. Montg'my Bk  
 je1 Old No. 145. [29]

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY  
**PEASE, BOWLEY & CO.,**  
**Real Estate, Stock and Exchange**  
**BROKERS,**  
 621 Montgomery street, San Francisco.

**LEGAL TENDER NOTES AND MINING STOCKS,**  
**BOUGHT & SOLD.**  
 je-29

**PUMPS!**  
**HARRISON'S**  
**California Lift and Force Pump,**  
 WITHOUT VALVES OR PACKING,  
 Suitable for Mines, Fire Engines, Wrecking or Irrigat-  
 ing. This is the Cheapest, Lightest and most Durable,  
 and least liable to get out of order, of any Pump yet in-  
 vented.  
**ALL SIZES;**  
 Capable of throwing from ONE HUNDRED to FIVE  
 THOUSAND Gallons per Minute—For sale by  
 C. H. HARRISON,  
 PHOENIX OIL WORKS,  
 je-15 517 Front Street, San Francisco.



**DR. H. AUSTIN,**  
**DENTIST,**  
**No. 634 Washington street,**  
 Between Montgomery and Kearny, (over San Francisco  
 Baths.)  
 I have recently received from London a New and  
 Beautiful Vulcanite (India Rubber) for Artificial Teeth,  
 which is far superior to any other ever used. It is light  
 cleanly and durable, and of a natural color. The cheap-  
 est and best material for temporary (and in many cases)  
 permanent sets. All operations thoroughly performed,  
 and at reasonable prices. je-29

**L. F. LELAND,**  
**STOCK BROKER,**  
**No. 621 Clay street,**  
 Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.  
 Member of the San Francisco Stock and Exchange Board  
 je-29

**New Bedford Copper Company.**  
**THE UNDERSIGNED HAVING BEEN APPOINTED**  
 Agents for the above Company, are receiving regu-  
 lar supplies of their superior manufactures of  
**SHEATHING COPPER;**  
**BRAZIER'S COPPER;**  
**COPPER BOLTS;**  
**YELLOW SHEATHING METAL;**  
**COPPER AND COMPOSITION NAILS;**  
 Which they offer to the Trade at the lowest market  
 rate, and on the most favorable terms.  
 MORGAN, STONE & CO  
 je-29 108 Front Street, San Francisco.

## Napoleon Copper Mining Company.

**Capital Stock.....\$1,620,000.**  
**2,700 Shares—\$600 Per Share.**  
 Length of Lead 2,700 Feet: Location of Mine, Gopher  
 District, Calaveras county: Incorporated  
 October 3, 1862.  
 President.....F. MACCRELLISH  
 Secretary.....Q. C. ALDEN  
 Treasurer.....R. G. BROWN  
 Superintendent.....RICHARD FOWNEIF  
**TRUSTEES.**  
 F. MACCRELLISH, of Alta California  
 M. ERIENBACH, of Greenberg Erienbach & Co.  
 A. J. MOUTLER, of A. J. Moutler & Co.  
 R. G. BROWN, of Grover & Baker S. M. Co.  
 J. C. DUNCAN, of Duncan & Co.  
 R. C. ALDEN, U. S. Commissary Department,  
 J. W. TUCKER, of J. W. Tucker & Co.  
 W. A. WOODWARD, of Alta California.  
 S. E. HOLCOMBE, of Holcombe Brothers.  
 W. L. DUNCAN, Secretary California Pioneers.  
 Office of Company, No. 420 Montgomery street.  
 je-29

**San Antonio Gold and Silver Mines,**  
 L. W. CALIFORNIA,

**FORWARDING & MINING AGENCY.**  
**SAMUEL SMITH,**  
 OFFICE—North West Corner of Front and Clay  
 Streets, San Francisco.

**MINING MACHINERY AND MERCHANDISE FOR-**  
 warded, Mining Claims secured, through the  
 resident Agent at San Antonio, and information fur-  
 nished regarding any claim, in that Territory, on Com-  
 mission. je-26

**PEOPLE'S**  
**Steamship Line!**  
**Connecting California and New York**  
**VIA NICARAGUA.**  
**750 Miles Shorter than any other Route!**

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
**J. H. BLETHEN.....COMMANDER**  
 Will be dispatched for  
**SAN JUAN DEL SUR,**  
 From Mission street Wharf.  
**THURSDAY, - - - - JULY 23, 1883.**  
 Punctually at 9 o'clock, A. M., on  
 Connecting at GREYTOWN with the Splendid Steamship  
**AMERICA - - - - - 2500 Tons.**

Reduced rates of Passage and quick trips are secured  
 by the re opening of the Nicaragua Route.  
 These Steamers are unsurpassed for speed, cleanliness  
 and safety, and every effort will be made to insure the  
 comfort of passengers.  
 For further information apply to  
 I. K. ROBERTS, Agent,

**FOR SALE.**  
**PATENT PRESSED RUSSIA IRON MINING PANS.**  
 Russia Iron Quartz Screens for Mills;  
 Portable Forges; Cauldron Kettles;  
 Pumps, both Frame and Lift;  
 Lead Pipe; Rubber Hose;  
 Wrought Iron Pipe;  
 Bibb Cocks; Couplings; Flay Pipes;  
 Cooking Stoves and Heating Stoves;  
 Tin Plate; Sheet Iron; Sheet Copper;  
 Fruit Cans of Various Kinds;  
 Lard and Butter Cans of all Sizes;  
 Iron Wire; Brass Wire; Copper Wire;  
 Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the  
**UNEQUALLED**  
**MONITOR COOKING STOVE**  
**OR RANGE,**  
**FOR HOTELS.**  
 To which we call particular attention.  
 je-29 TAY, BROOKS & BACKUS.

**The Pacific Mineral Company**  
**MAKE LIBERAL ADVANCES UPON THE ORES OF**  
**COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,**  
**LEAD, AND SULPHURETS CONTAINING GOLD.**  
 Due account taken of all valuable metals combined  
 with Silver and Copper Ores, and advances made there-  
 for.  
 Parties owning undeveloped mines and desiring capital  
 to prospect the same will receive assistance, if, upon ex-  
 amination, such lands are deemed sufficiently valuable  
 to justify such expenditure.  
 OFFICE, No. 1, ODD FELLOWS' HALL,  
 je1-tf Montgomery Street, San Francisco.

## ASSAYS!

**Promptness and Accuracy Secured**  
**BY THE USE OF THE MOST IMPROVED**  
**METHODS OF**  
**ANALYSIS!**

**Advantageous Terms for Prospector's Clubs**  
 and Mining Companies.

**J. H. CHURCHILL, M. A.,**  
 (FROM EUROPE.)  
 Room 24 Government Block, corner of Sansome and  
 Washington Streets, San Francisco. je6

**A. C. MORSE,**  
**Mining and Real Estate Agent,**  
 Office—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS**  
 with MINER S. MARTIN ESQ., one of the principal  
 Stock Brokers of San Francisco, I am prepared to BUY  
 and SELL every description of Mining Stocks in Em-  
 eralda District

**Miners' Foundry**  
 —AND—  
**MACHINE WORKS,**  
**First St., between Howard & Folsom,**  
**SAN FRANCISCO.**

**EVERY DESCRIPTION OF IRON AND BRASS MACH-**  
 inery, the Best and Most Economical, manufactured  
 in the state of California, will be furnished with dis-  
 patch at the Miners' Foundry and Machine Works, as:  
 Steam Engines and Boilers, Flower, Saw and Quartz  
 mill machinery, Mining Pumps, Amalgamators, Retorts,  
 Etc., Etc., Etc.  
 Particular attention will be given to the manufacture  
 of Machinery in Sections, designed for places of difficult  
 access. Various models of Quartz Crushers, Amalgama-  
 tors and Water Wheels—some in operation and on exhi-  
 bition.  
 \* Parties desiring to test their ores practically, in  
 small quantities will be afforded ample facilities, free of  
 cost.

All parties desiring accurate and highly finished draw-  
 ings and Superior Machinery, at most reasonable rates  
 are cordially invited to call before contracting elsewhere  
**HOWLAND, ANGEL & KING**  
 San Francisco, February 23, 1883

**New Patent Agency.**

**WE HAVE CONNECTED WITH THE**  
 Publication of the "Mining and Scientific Press"  
**The Patent Agency Business,**  
 And would invite Inventors and Discoverers on the Pa-  
 cific coast, who wish Dispatch as well as Economy to call  
 upon us. We have an Experienced Agent at Washing-  
 ton, which, together with our own experience of several  
 years, renders the

**Mining and Scientific Press Agency**  
 The most desirable place to make application for Letters  
 Patent on the Pacific coast. Apply at  
 Office of the "Mining and Scientific Press," Room  
 No. 27, Federal Building, corner of Battery and Wash-  
 ington streets, (directly opposite the Post Office.) San  
 Francisco. EWER & SMITH.

**FOREIGN PATENTS OBTAINED**  
 By application at this office, Room 27, Federal Building.  
 EWER & SMITH, Solicitors.

**NOTICE TO INVENTORS.**  
 Inventors wishing to file Claims should apply at this  
 Office, Room No. 27, Federal Building. Terms moder-  
 ate. EWER & SMITH.

**PATENT RIGHTS.**  
**Patent Rights Bought and Sold,**  
 At the office of the "Mining and Scientific Press" Agency  
 EWER & SMITH.

**IMPORTANT TO INVENTORS.**  
 Inventors who obtain their Patents through this Office  
 can have their Inventions illustrated and described in  
 the columns of this paper FREE of charge, thereby more  
 fully furnishing the engravings. We are also prepared to fur-  
 nish engravings at reasonable rates. Those who do not  
 care to go to the expense of having engravings prepared  
 can have their inventions fully noticed and described in  
 our columns free of charge. The free use of our col-  
 umns to aid them in introducing their inventions to the  
 public will be found a most important advantage to in-  
 ventors. EWER & SMITH.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, JULY 20, 1863. NO. 38.

## ESMERALDA.

A most unfortunate concurrence of circumstances seems to have operated, within a few months past, to greatly depreciate Esmeralda Stocks, and to destroy, to a great extent, the confidence of capitalists in this city in the value of the mines of that region. This depreciation, we have good cause for believing, has not been so much from a failure of the yield of the mines, as from the bad management of several of the leading Companies. There are not a few who openly impute improper motives, to some of the managers here spoken of. It would be difficult to convince a large portion of the Stockholders of the Wide West mine, that that mine might not under a proper management, have been made a dividend paying institution months ago, with its stock rating full one hundred per cent. or more, above its present market value. Of the facts in the case we know but little; we simply give the most current and commonly received impressions in Esmeralda, in justification of the claim set up for a fair average valuation of the mines of that region. In addition to the above supposed cause for reaction, much damage has unquestionably been done to good interests in that region by wild cat speculators, who have palmed off upon unsuspecting buyers in this city, thousands of feet of ground, utterly worthless, and which in many cases never had any other foundation than the paper upon which they were represented.

Another important reason for distrust in the mines of Esmeralda has undoubtedly resulted in the following just cause for complaint which we clip from a late number of the Esmeralda Star:

Thousands of ounces of bullion of gold and silver are continually leaving our town, for which we get no credit whatever. It is all credited to Washoe, simply because in crossing the Sierra Nevada it is sent by the Placerville route. We hope the Sonora road will soon be opened, and then Esmeralda and Bodie Districts will get the credit due them. It is from this fact, more than anything else, that our people have been averse to being thrown into the Territory.

The evidences appear to be conclusive that the Esmeralda region contains many rich and valuable mines, and it is a good cause of complaint that the bullion shipments from thence should be placed to the credit of other localities. The numerous well defined ledges, in that locality, the large amount of work done on them, and the amount of bullion known to have been taken out of them give unmistakable evidence of their value. It is idle to talk about failure in a region where such claims as the Wide West, Antelope, Del Monte, Utah, Garibaldi, Rambou, Ural, Crockett, Silver Hill and numerous other good and perhaps better claims are to be found.

Good will undoubtedly result from the present reaction in Esmeralda Stocks. The time has gone by when a few loose boulders can be made the basis of a mining operation, and wild-cat speculations can no longer carry into market their spurious stocks upon the prestige of such well known claims as those above enumerated. Already we notice a disposition in that region to fall back upon exclusively legitimate operations—to so develop the mines as to get good prices for their feet, instead of running to this city to dispose of

good feet for any price, by virtue of hard blowing. We have much faith in the concluding paragraph of a private letter before us, from a friend in Esmeralda, who writes:—"Give us good mills and honest men to work them, and we will show you bullion that will throw most other districts in the shade."

## THE COLORADO GOLD REGION.

Considerable activity is now being manifested in working and developing the Gold Mines of Colorado Territory. The Miners' Register, of a late date, published at Central City, in that Territory, gives the following interesting items:—

"YIELD OF THREE QUARTZ MILLS.—Messrs. Lee, Judd & Lee cleaned up from their Black Hawk, Eagle and Tiger mills, during the week ending May 2nd, \$4,782. During the week ending May 9th, \$5,434, making a total of \$10,216. We doubt whether any of our eastern capitalists can boast of a greater income than this. It is at the rate of \$265,626 per annum. We know of no reason why they should not do as well in the future as they have hitherto. Such are the results obtained from small beginnings in this land of gold.

SOLID GOLD.—J. Q. A. Rollins showed us yesterday a specimen of solid gold, taken from Gold Dirt Lode in '60 which weighed over (90) dollars. This is the largest natural piece we have ever heard of as having been taken from a lode in this Territory. This lode furnished several of a smaller size soon after its first discovery.

BEAUTIFUL SPECIMENS.—We saw a few days ago, at Horton, Pratt & Co.'s, a very fine gold specimen, from the Perrin Lode, taken out at the depth of about twenty feet. It was a piece of thoroughly burned quartz colored with oxide of iron. Wire gold could be seen all through it. We have long known the lodes of Russell's Gulch to be rich, and this is another proof of it. We were also shown another specimen from the Patch by Hon. H. F. Parker, containing several dollars in solid mass. It was contained in a seam of quartz passing through a block of granite. But few finer specimens have ever been found in the country.

GAYLORD'S PURCHASE ON THE GREGORY LODGE.—There have been some important changes in the ownership of property lately. Among them we may name the purchase of the Parker Mill property by W. E. Gaylord, of Washington, D. C. This mill is conveniently situated in Nevada Gulch, and has an abundant supply of water. Its number of stamps is to be increased to twenty-four. The mill is to be re-erected and put into complete running order. Mr. Gaylord also purchased a number of valuable mining claims; among which we may specify some eight hundred feet on the Nevada Lode, which runs within sixty feet of the mill and can consequently be worked—so far as elevating quartz and water goes—by the mill engine. This lode promises very well. It was first discovered by mining the gulch which runs along its course for several hundred feet, and was in this way uncovered for a long distance. The sulphurets crop out so far as it has been traced. Mr. Gaylord has also purchased a valuable tunnel claim, which enters the mountain at the mill. The tunnel crosses all of the most valuable lodes on Quartz Hill, and if properly pushed will be a fine thing."

## MINERAL WEALTH OF SOUTHERN CALIFORNIA.

Until very recently but little attention has been paid to the development of the mineral resources of Southern California. Operations have hitherto been confined to mere surface explorations. Scarcely a shaft has been sunk beyond twenty-five or forty feet deep, or a tunnel run any greater distance into a hill or ledge. Even these superficial explorations have been limited, and confined to but a very small number of even those veins whose existence has been observed. Still, the specimens obtained compare favorably with those from any other locality, either in the State or adjoining territories. An accumulation of such specimens would form a collection, which, for variety and richness, would compare favorably with almost any cabinet in the world. Gold and silver bearing quartz, copper ore in all its varieties, cinnabar, tin and other ores have been found in this region, in great profusion, and the country only needs a few more thorough and go-ahead miners, with a reasonable amount of capital to develop as rich a mineral country as can be found on the globe. We would include in that region of which we are speaking the Owen's River and Coso country, Slate Range, Tehachape, Soledad, Holcomb, Valley, Mohave, the region about San Bernardino and the mountain range back of, and to the Southward of Los Angeles, in which are located the Temescal tin mines.

Well authenticated reports from this region, from highly intelligent and practical sources, unite in placing the highest estimate upon its mineral value. The scope of country included within the limits above described is not less than 500 miles in circuit, and a richer field for exploration can scarcely be found.

The letters which we are publishing from Mesquit Spring, one of which will be found in the present issue, are descriptive of the North-western Section of this region. The mineral developments of that locality are of the first order, as will soon be proven by ores which are now on their way to this city, in large quantities, for treatment here. Our correspondent there, will doubtless keep our readers posted in regard to the developments in his neighborhood. We have for some time been intending to prepare a series of papers descriptive of the Owen's River and Coso Country, comprising the North-eastern sections of this region, for which we have already an abundance of data. (Our correspondent there will please excuse us for the delay. We have not forgotten the mutual promise.)

The attention of capitalists is already being directed to this portion of our State, and we understand but little difficulty is found in making arrangements between capitalists and miners, whereby an abundance of means is being secured, by the latter, for partial interests in their mines, to properly open and develop them, with the ultimate erection of machinery. Miners in that region should lose no time in reducing their claims to shares. It is by such means only, as a general thing, that moneyed men can be induced to take hold of them, and their real value be properly developed.

In many parts of Pennsylvania the people are growing an excellent substitute for tea.



## MINING CORRESPONDENCE.

NOTES OF A TRIP TO SLATE RANGE via LOS ANGELOS AND EL PASO.—No. 6.

## SUPPLIES FOR A PROSPECTING PARTY OF THREE.

Two No. 1, 3-ft pole picks, 1 drifting pick, 1 short and 1 long handle, 1 round-pointed shovel, 4 to 6 steel gads, 1 8-ft cast steel sledge, 1 good hatchet, 1 good horn-spoon, 1 or 2 leather specimen-bags, 3 3-quart, blanket covered, iron canteens, wide straps over the shoulder; revolvers and a double barrel shot gun, with plenty of powder, caps and course powder for rabbits, 1 6-quart iron camp kettle, 1 4-quart do., lined with tin or a stew pan lined with porcelain or tin, to stew fruit in, 1 1-gallon iron coffee pot, riveted in every portion, with cover and strong bail, no nose except a little bend in the rim, 1 bake kettle, 1 frying pan, 1 large, tin, bread pan, 4 tin plates, 4 tin cups, spoons, knives and forks, 1 large iron spoon, 1 iron ladle, 4 tin, soup, quart tins with handles; some wire to make pot-hooks; good grub for three months—100 lbs. bacon and ham, No. 1; 200 lbs. flour, 100 lbs. beans, 25 lbs. rice, 25 lbs. dried apples, 25 lbs. peaches, 100 N. O. sugar, 2 doz., P. & M's yeast powders, 25 lbs. green coffee, 5 lbs. tea, a box coffee mill, or the coffee can be tied in a bag and be beaten quite fine, between stones, 1 lb. of pepper, 20 lbs. salt.

I would also recommend that the prospector take along small quantities of lard, ginger, allspice, cinnamon, nutmegs, pickles, catsup, and also a gallon of vinegar, also a keg of syrup. But these are all luxuries which can be easily dispensed with.

In the line of clothing, one pair heavy blankets and one pair of light for each person; a few articles of stout miscellaneous clothing, 2 prs. of heavy boots, well nailed, also two papers of tacks.

My daily wear is an old soft hat, with ventilators all around it, a hickory shirt, a pair of denim overalls and a pair of wooden soled brogans, with rawhide well nailed on the bottom; after sundown I put on a blue flannel overshirt. This is all the clothing I shall need till November, then I will probably want an undershirt and a pair of drawers, or a pair of cashmere pants, with an old coat to put on occasionally.

A tent is a great convenience. Ours is of the U. S. A. pattern,  $7\frac{1}{2}$  by 10, (cost \$10,) plenty of room for four to sleep in.

I would add to the above, a full set of apparatus and chemicals for the reduction of ores.

I have, probably, been somewhat liberal in my calculations for supplies, but at this distance from civilization, it will be well to be amply provided against contingencies.

I will conclude this letter by giving a few incidents, such as are daily occurring here, and which will give your readers a better idea of the country, than could be obtained from three times the same space devoted to descriptions.

## INCIDENTS.

I will mention some circumstances which often occur on on this road: Last week a man from San Bernardino via Los Angeles, came on to the Desert Springs, with a riding horse and a mule packed with grub and tools. He turned them out at night, as usual, and in the morning they were missing. He soon found their trail leading directly across the Great Mohave Desert towards San Bernardino. He procured a horse and started after them. The horse gave out after going five miles; he tied him to a bush and then started on the run, barefoot, on the burning sands. He ran about 3 miles, and then crawled back almost entirely exhausted. He had no food or water with him and had he continued on an hour longer he never would have got back. His animals probably perished, for it is supposed to be impossible to cross the Desert without carrying food and water for animals.

A Mr. Wall, from Stockton, came in last week from Slate Range. He had wandered from the trail, on a very fine riding mule and became nearly exhausted; was without food or water 24 hours. His mule's hoof split in consequence of a break in the shoe and could only walk by binding the riatta around the foot and as soon as it wore off and again. He laid down to rest two or three times and soon was asleep, when his mule took him by the shoulder and raised him to his feet. He has been told that had he slept long he would have awakened with a heavy fever

on him, been deranged and lost. He had to leave his mule 20 miles back on the road and come in to my tent.

About three weeks since an ox-teamster stopping at Desert Springs, went out to collect his cattle and found two missing; he rode over the hills and found two Indians and a white man driving the two before them. He gave chase, though he had no arms with him, and they fled. He drove his cattle back and sent a man to the Company of Soldiers, then stopping at Grape Vine Springs, tried to get them to go out and take the party, as they had plenty of horses, but the soldiers would not start a foot. Two weeks since my partner wishing to come here from Slate Range, started in the afternoon, expecting to travel all night, as all try to do in crossing the dry alkali and salt lakes between this place and that. He traveled with a man who had a two-horse team and a light wagon. Towards morning they unhitched their horses to let them rest or browse, and laid down themselves. They soon concluded that the horses would travel off for water or food, and they turned out to hunt them in the dark. My partner, half asleep, soon espied two horses moving towards Slate Range, and he ran around and came in ahead of them and yelled "whoa!" just as he noticed two men on the horses, with their revolvers pointed at his head. They had noticed his movements and were ready for him, supposing him to be an Indian. The sound of his voice showed them that he was no Indian and he soon explained his object and mistake, and the travelers passed on.

A few days since five Indians came into camp at Laurel Hill, about starved. They were a portion of the party who went from Tehachapa to assist the Owen's River Indians in their late war with the whites. They cannot go to Tehachapa, where their squaws are, as the residents will kill every one of them, and they will wander about till some parties not so tender hearted as ours, will use them for rifle targets.

Night before last Mr. Griff Williams was lying in J. A. Talbott's cabin, reading a paper, and feeling something crawling on his whiskers caught it and squeezing it he felt a sharp pain. On opening his hand out fell a large light green scorpion, which had stung him on the fore finger. He immediately applied wet tobacco. The whole hand swelled some and pained him for three hours, then ceased and in the morning he could find nothing but a little black spot, where the sting entered. This goes to show that they are not dangerous. Perhaps at a later part of the season, they may be more poisonous.

C. W. T.

MESQUIT SPRINGS, JUNE 15, 1863.

## A CALIFORNIA INVENTION.

The Stockton Independent speaks of a new "Harvester," a California invention, in successful operation on a ranch about two miles from the Wat rloo House on the Calaveras. This machine is the invention of a Mr. Marvin, and with the labor of three men and 12 horses, is able to cut, thresh and sack the grain produced upon ten to twelve acres, per day. On the 10th inst. its day's work resulted in the cutting, threshing and sacking 300 bushels of wheat. The machine was built with more reference to durability than ornament, yet is neat and as light as the character and amount of work it is required to perform, will permit. Its cost was nearly \$1,200. The machine is said to work most admirably and has been endorsed by all practical farmers who have witnessed its operation, as the best in use.

## METALS.

The price of copper, at the present time, at the East, is 31 cents per pound.

Tin is selling at 42 cents. A year and a half ago it was commanding but 28 cents in New York.

Lead is now worth 8 cents in New York. There has been an unusual demand for this metal, for the last year, for military purposes.

Zinc is worth 7 cents. About 3,000 tons of this metal are consumed in the United States, a little over one half of which is the product of domestic mines.

Iron of all kind is in great demand at the present time. The production of this metal at the East is being pushed with all possible vigor. Pennsylvania pig is worth \$30 to \$32 in New York.

Cast steel, for mining purposes, in this State, is very scarce and held at 40 cents per pound. Of late, supplies have come to hand via Isthmus, and more ordered. Steel of ordinary sizes quotable at 25c. Nails have advanced to \$4 50.

## SPECIAL NOTICE.

•Some weeks since we forwarded blank receipts to such of our subscribers as are in arrears for their subscriptions. Some have promptly answered by remittances of the amounts due; others have notified us of special contracts with our predecessor, or of full payments made to him and not credited on our books. Where payments have thus been made, we have, in every instance, allowed them. There are quite a number, however, who have returned no reply to the bills which have been sent out. We trust all such will respond immediately upon seeing this notice. If payments have been made, we wish to be notified of the fact, so that due credit can be given; and if there are any to whom the paper is now sent who do not wish to continue it or do not intend to pay their subscription, we hope they will notify us of the fact so that we may discontinue sending papers to them. We do not wish to crowd the paper upon any man. All the names upon our list have been placed there, as subscribers, upon what we have deemed good authority. If any party, not considering himself a subscriber and in arrears, has received a bill for subscription, he will confer a favor by notifying us immediately of the fact. Postmasters are also reminded of their duty to return a paper that is not called for, etc.

It is stated that Gens. Grant and Pemberton were, some years ago, both lieutenants in the regular army, and belonging to the same regiment. They were stationed at Detroit. We have also heard it stated that they married sisters. The wife of the latter, the telegraph has announced, was killed, during the bombardment, by a bursting shell.

SCARCITY OF WATER.—The water, from the melting snow is already beginning to dry up in many portions of the mines. The indications are that the placer mining will be a very short one this year. The miners in quartz, however will be proportionally benefitted. What is death, or at least an important drawback to one, is life to the other.

ACID MANUFACTORY IN NEVADA TERRITORY.—Messrs McKeeley, Ross & Frazer, are about erecting an establishment in Carson City, N. T., for the manufacture of acids such as are used in the mills and assay offices of that Territory. The works will be in operation in about one month from this time.

BOILING MEAT.—It is the statement of Dr. Lankester who is the best authority, that albumen is contained in all meat; and if you put meat in cold water it gradually exudes but if you put it directly into boiling water, you produce a covering of coagulated albumen around the meat, which keeps in, to a considerable extent, the creatine and all the precious products of the juice of flesh. The water should boil; that is, it should have a temperature of 212°, and be kept at that heat for ten or twelve minutes; then the heat may be reduced to 140°, and kept at this heat until the whole is cooked.

The valley of the Connecticut River will this season be appropriated almost exclusively to the culture of tobacco. In 1860 over six millions of lbs. of tobacco were raised in the State, and this year the amount will probably be doubled, which, with the price also doubled, will render profitable returns to the producers. Connecticut is the tenth State in the Union in the amount of tobacco raised.

TO PREVENT KETTLES FROM RUSTING.—Dr. Osborn says that crusty deposits which gather on the inside of kettles used for boiling water may be prevented by placing a common clay marble in each kettle. The deposits having greater affinity for the marble than the sides of the kettle gather around the former and increase its hue, while the latter are left as bright and clear as when new.

THE NEW GOLD FIELD.—Accounts from Arizona are very flattering about the recent discovery of gold placer digging on the Frio, a tributary of the Gila River. It is asserted that they equal the American River in 1848. However it may be, certain it is that good placers have been discovered. Mr. Krenberg, a gentleman of scientific observation, who has made that country a study for years, predicted months ago that the next great gold-field would be Arizona. Still further on than the previous discoveries, he says, richer diggings still will be discovered. The facility of access and the favorableness of the climate will place these diggings, if rich as reported, far ahead of the Northern mines.



A NEW GOLD SAVER.

The invention consists of a grand pan probably three feet in diameter on the bottom, widening out towards the top, and about sixteen or eighteen inches in depth. The pan has a bottom of peculiar construction, and in it, all the crushed quartz that comes from the stampers is ground by a process we will attempt to describe. The water and the crushed quartz pass through a heavy iron apparatus that revolves horizontally. Upon the bottom of this are shoes ingeniously arranged to grind the particles of rock to an impalpable powder in the bottom of the pan which is covered to some depth with quicksilver. The shoes work over the entire bottom of the pan. Between the revolving cylinder and the rim of the pan is a space of some eight inches or more, divided into two parts by a hoop or bottomless pan, which extends down to the quicksilver allowing the grinding *feet* to move around under it. The appearance on the surface of the concern is that of two pans, one within the other and four inches from it, and a cylinder of iron revolving around the inner one. Between the cylinder and the inner pan is a space of, say, four inches, in which the water and dirt is violently agitated by the moving cylinder, but between the outer and inner pan the water is still, and this still water is one of the best features of the invention, as it enables all the finer particles of gold to settle there. The water discharges from a depression in the top of the grand pan, and mercerized copper plates over which it flows for a distance of fifteen, feet afterwards show not a trace of gold—a pretty sure indication that the pan does the work for which it was designed. A glass of water dipped from between two pans, when allowed to settle, exhibits a mud almost as gritless as soft soap.

The machine runs constantly without any care, and it is reported that it never clogs or gets out of repair except by the natural wear of the parts. Some men, professedly familiar with quartz mining, are sanguine that the machine is just what has been required to save gold, and predict for it great success. It looks simple, cheap and rational, in any aspect in which it may be viewed, and it is claimed that experience so far in its use demonstrates its superiority over any other apparatus for saving gold.

Maguire's Opera House.—During the past week the performances have consisted of a judicious selection of Tragedy and Comedy, giving to all the actors a good opportunity of showing their peculiar *forte*. The acting has been excellent. In our opinion, Mrs. Edwin has lately shown a tragic talent which no other actress in the State possesses. Miss. Sweet, also, has taken a more prominent position, and acquitted herself well. While the Management continue their present exertions, they need not be apprehensive about patronage.

THE INTERNATIONAL HOTEL, under the management of F. E. WEYGANT, Esq., was never under a more full tide of success than at the present time. Situated on one of the principal thoroughfares of the city, and easy of access to all our river steamers, it presents a most desirable home for travelers and strangers from abroad. The hotel has recently been remodeled and supplied with new furniture, beds and bedding. The proprietor is well known as a gentleman ever anxious with regard to the accommodation and comfort of his guests.

ARCHITECT—Those intending to build, either private or public edifices, would do well to consult Mr. C. Geddes, as per advertisement. Reasonable prices, buildings designs suitable to the location, and substantial work, are the three great merits Mr. G. claims for patronage.

[illegible]



## THE CALIFORNIA SMELTING WORKS.

We are frequently enquired of with regard to the progress which the "California Smelting Works" are making towards the commencement of active operations. In reply to such numerous enquires we would remark that the Company appear to be somewhat reticent upon the subject, but from conversation with several parties connected with that institution, we have learned the following facts, which, we presume, we can lay before our readers without any breach of confidence.

The Company have erected one Reverberatory Furnace, capable of working about *fifteen tons* of ore a day. They do not intend to carry the metal through the refining processes, and complete the manufacture of copper. They will merely convert the ore into "regulus," an operation which they will perform as follows:—A given quantity of the different ores are turned into the furnace, the average of which must not assay over 10 or 12 per cent. The whole is well heated, and in the course of a few hours the furnace is tapped and the entire mass drawn off, in the condition of what is termed *regulus*, which will assay from 40 to 60 per cent. of copper, the percentage depending mainly upon the mixture of the ores from which it has been obtained.

The Company, we presume, will not commence operations until they have accumulated a supply of some 2,500 or 3,000 tons of ore at their works at Antioch. They are now purchasing ores at the rate of a *out* \$2 for each per cent. of copper the ore contains. They pay for;

11 per cent. ore \$22.  
12 " " " 25.

As we understand it, the Company prefer to purchase a low, rather than a high grade of ores; which fact, if it is a fact, will be particularly interesting to those miners whose ores rate, say from 10 to 15 per cent only. The Smelting Company will pay all charges of transportation, on the receipt of the ores at their wharf, which amount will be deducted from the purchase price, on settlement. Any shipment will be assayed, and paid for within two weeks from the date of its receipt. The Company have already made considerable purchases in Calaveras, Nevada and Yuba counties. We have no knowledge of the time at which they will commence smelting operations. That time will be governed entirely by the rapidity with which the ore comes in. It will not be profitable to commence smelting until about the quantity mentioned above has been received.

**OUT OF PRINT.**—We regret that we cannot furnish back numbers of the MINING AND SCIENTIFIC PRESS, containing the articles under the head of "The Miners' Laboratory," without going back to the first of November last. The unexpected demand for these papers has already drawn upon our regular files. We have still left, however, a few complete files from November last, which will be disposed of at the regular subscription price—four dollars from November, 1862, to November, 1863. To those who are not able to obtain the back numbers of the "Laboratory," we would say that we propose soon to reprint those papers, in a revised form. We have much other valuable matter in store for our readers, that are, and that are to come.

**ST. IGNATIUS COLLEGE.**—We have received a copy of the Annual Prospectus and Catalogue of St. Ignatius College, of this city. The college edifice is located on Market Street, between Fourth and Fifth. This literary institution was founded in October 1855, and, numbered at the close of the last term, according to the catalogue before us, 462 students. The design of the institution is to give a thorough Classical, Mathematical and Philosophical education. It was incorporated April 1859, and is fully empowered to confer degrees and academical honors in all the learned professions. The faculty and officers comprise thirteen gentlemen, under the presidency of Rev. N. Congiato. The next term commences on the 24th of August prox mo.

**FOR THE EAST.**—Two Ocean Steamers leave this port, on Thursday next, for the East. The favorite steamer *Moses Taylor*, under command of Capt. Blethen, takes her departure from Mission Street wharf, while the P. M. S. S. Co. dispatch the finest boat of their line, the *Constitution*, commanded by Capt. J. S. Watkins, at the same time, from the Company's wharf at the foot of Folsom Street. Fares will undoubtedly be low, and no doubt a large number will improve this opportunity, to visit the "old folks at home."

## COPPER MINING CORRESPONDENCE.

**EDITOR MINING AND SCIENTIFIC PRESS:**—Having recently made a trip through the Copper Regions of a portion of Nevada and Yuba Counties, I have thought that I may be able to give you a few items that may be of some value to your numerous readers, all of them, nearly, being either directly or indirectly interested in Copper Mining, which is rapidly becoming one of the most widely extended departments of Mining in the State.

At present there is scarcely a county in California but where indications of copper are found. The copper ore, also, of each district, possesses some marked peculiarity of its own. There is a wide difference between the outward appearance of the Calaveras county copper and that of Yuba and Nevada. Most of the copper, in the former county, is more or less mixed with slate; but in the latter counties, with few exceptions, it is found mixed with quartz. From all outward indications, Nevada and Yuba promise to turn out large quantities of fine ore.

The Wilson district, about seven miles from Lincoln, is being vigorously prospected by several parties, all of them, nearly, being fortunate enough to find the outcroppings, and other accompaniments of copper lodes. Thus far, however, but little copper ore, of any value, has been taken out. They have one shaft here, sunk to about 75 feet; but the copper ore is as yet of rather a low grade; but with proper care and attention would be easily concentrated at the mines.

The miners at the Zinc House district, about 12 miles from Lincoln, are also getting very flattering and encouraging prospects; and this district, I have no doubt, will create quite a stir before long, among copper speculators. Among the claims of this district, that of the Well Mining Company, is the best and most promising. This Company has a mass of ore, *about thirty feet in width*, and upon this mass they have sunk a shaft to the depth of about 35 feet in one place, and another shaft, at a little distance from the first, is down to the depth of about 30 feet. The quality of the ore is improving in percentage, every foot they go down.

There are several very good claims also, a few miles north of the Zinc House district, on the Green and Downey leads; among some of the best of which are the Eureka and Last Chance. Both of these claims are turning out very fine ore indeed; and were it not that it is a little mixed with quartz, the percentage of copper would be very high. There are several other claims on these leads or claimed to be on them, as I should have said, but they have not struck anything as yet, and I do not suppose it of any importance to give you a description of every hole the miners are sinking in expectation of finding copper, with as little chance of doing so as if they claimed Telegraph Hill, and mined the same for copper. In this district there are a few other claims which may turn out good, such as the Alabama, Mammoth, Duffy, Wild Irish and Confidence.

A few miles south of the Zinc House, is another copper district, called the Monitor. So far but one good claim has been found here, and that is called the Red Lead. Unlike the other claims, this copper ore is mixed with slate, and not quartz. There is no mistake but that they have a fine show here.

There is one remark I wish to make on copper mining in California, which is, that at not a single mine do they adopt any method, whatever, of *dressing their ore and separating it from the gangue*; and with few exceptions, but little care is taken in the shaft, to blast the rock in such a manner as to properly save the ore. In several of the claims I visited, *fifty per cent of the ore was lost*, by bad workmanship, and forty per cent. by not dressing their ores. It is a pity to see such a large quantity of ore being entirely lost. In a number of places, dirt, stones and ore are all dumped together, while by following your instructions under the head of the "Miners' Laboratory," the whole could be separated with but little cost. Copper Mining will not pay unless the miners will adopt some plan to save their ore. Could you not, Mr. Editor, give the miners a description of some cheap apparatus without much complicated machinery to separate the gangue from their ore?

T. PRICE.

SAN FRANCISCO JULY 18TH, 1863.

**CORRESPONDENCE—NECESSITY OF STUDY AND EXPERIENCE AMONG COPPER MINERS.**—In another column will be found a letter from Mr. THOMAS PRICE, descriptive of the progress of the Copper Mining interest in a portion of Nevada and Yuba Counties, which that gentleman has recently visited. Mr. P. is thoroughly posted with regard to Copper Mining in all its various phases, and his remarks are eminently worthy of attention. We would call especial attention to the concluding portion of his letter, on the importance of the manner of extracting the ore from the mines, and its proper manipulation and separation on the surface. We have heard similar remarks made by other experienced copper miners, with regard to the wasteful manner of handling copper ore at the mines, by parties, in this State, who have had little or no experience in such matters.

Copper mining like all other branches of industry, in order to be made successful, must be conducted under experienced management. The lack of experience in this branch of our mining interest will doubtless prove a great drawback to copper mining in California, for some years to come. That experience will be gained sooner or later—and all the sooner, in proportion, as our miners take the trouble to embrace all the means at hand to inform themselves with regard to the nature and *modus operandi* of their peculiar calling. *Scientific books* are but of small account in accomplishing this end. What is wanted is *practical information from practical men*. That information we are endeavoring to collect and spread before our readers. The letter we publish to-day and the article under our "Miners' Laboratory" of June 29th, will be found especially important in this direction.

Other articles will follow in due time, as we may be able to collect them from various sources. Probably but few of our readers are aware of the difficulties in the way on this Coast, or the time required for obtaining information of this class which may be really valuable. A multiplicity of duties, always attendant upon the starting of a new enterprise of this kind, has thus far prevented us from bestowing that attention upon our editorial labors which is desirable, and, in fact absolutely necessary, to make our columns useful. The encouraging and increasing favor with which our efforts have recently been met gives evidence that we shall soon be in a condition to make this paper, what such a journal should be, an indispensable companion to every one engaged in mining.

**THE MARY L. GARDINER.**—We have taken considerable pains to ascertain the facts in the case of the reported sudden advance of the stock of the Mary L. Gardiner, as given in our Esmeralda Stock Report of June 29th and July 6th. Letters from responsible parties in Aurora, assure us that there was no foundation whatever for the reported discovery of rich rock, or advance of that stock. Our correspondent writes that he was imposed upon in the matter, by one of the owners in the claim, "who has always, heretofore, been looked upon as a reliable man," and that he should take due precaution that such an occurrence shall not be repeated. We have reason for believing that our Stock Report for outside localities has been as correct and reliable as is consistent with the unsettled and fluctuating condition of such markets. Our chief regret is that our correspondent has not furnished us with the *name* of the party who has sought to, thus surreptitiously, make an improper use of our columns.

**MEXICAN ORES.**—The Steamer Oregon, which arrived on Wednesday last, brought up from Cape St. Lucas, 600 sacks of silver ore and 286 bars of unparted silver and lead.

**RICH COPPER DISCOVERY.**—The Ione Chronicle has the following: About one year ago, Johnson & Co., and McNeely & Co., of this place, discovered rich copper croppings near the old Boston store, on Dry creek, about two and a half miles north of Ione. As the ledge is on the Pico Grant, the discovery was kept quiet until the title was confirmed, when McNeely effected a compromise with the proprietors, and commenced sinking a shaft on his claim. On the 8th of July, at a depth of two feet from the surface, a lode of very valuable ore was struck. The vein is about five feet in width, and clearly defined. This lode is thought to be the richest yet discovered in the State, and runs through our town.



## THE MINING SHARE MARKET.

The Mining Share Market, during the past week has quite resumed its wonted activity. The transactions have been large and generally at well sustained rates.

The chief excitement of the week has been connected with the Ophir. This stock opened at \$2,400, a decline of \$30. Dispatches were received, on Thursday, that the mine had been seriously damaged by an extensive cave which commenced in the Mexican mine, adjoining, and gradually extending into the lower galleries of the Ophir. In consequence of this intelligence the stock gradually fell to \$2,000. Later and official advices are to the effect that but comparative little damage has been done. The loss of time at the mine will not exceed a week, while the supply at the mills is full three months ahead. The result of this latter intelligence has been to produce some improvement. The closing quotations are \$2,025. Four hundred and eighty-four shares have changed hands during the week.

Gould & Curry shares have improved somewhat, with small transactions, however. An improved dividend for the present month, is now more confidently expected than ever.

Chollar has materially improved—as high as \$1,072 having been paid to fill time contracts. We quote at \$960.

Hale & Norcross is quoted at \$1,900 @ \$2,000. Further developments, at this mine, are anxiously looked for.

Considerable business has been done on Buckeye Shares, Devil's Gate District. 856 shares have changed hands at \$10. This has been the "fancy" of the week.

ESMERALDA STOCK has been considerably delinquent, fluctuating and generally falling rates.

Wide West has been quite active at declining rates. Shares open at \$165, advanced to \$175, and closed at \$150. Favorable reports are received with regards to progress on the artesian well for this mine.

Silver Hill has been largely dealt in at prices varying from \$35.50 @ \$55.

Esmeralda is offered at \$20, Utah at \$65.

Sheba, declined from \$175 to \$165; recovered to \$285. This extravagant change is attributable to the fact that the ore from this mine, although very rich, cannot be worked by any process in this country.

De Soto, dull at \$70; Reese River, \$1; Josephine, \$9; Blue Ridge, (El Dorado) advanced to \$17; Melones, dull at \$5;

## COPPER.

We have nothing specially new in Copper.

Highly encouraging accounts are coming in from Del Norte county. The Drummond Co., Richland District, are sending down very rich copper ore, largely mixed with black oxide. The Company is sinking a shaft on a three foot lead, and have commenced two tunnels to open their mine.

The Pearl also in the same district, has a three foot lead, and are taking out rich ore, carrying much red oxide of copper.

Street rumors reach us of new developments at the Evoca. We have learned no particulars, but understand they are important.

A NEW KIND OF ROCK FROM REESE RIVER.—The editor of the Territorial Enterprise has seen a sample of rock taken from a ledge in the Reese River country, which promises to be of great value as an assistant to the mining interests. It is apparently a peculiar species of soap or free stone, soft, and easily cut with a knife or saw, free from grit, and resembling in appearance the mottled red and white pipe stone, quarried at a single point in the heart of Dakota Territory, and held sacred by all the Indian tribes east of the Rocky Mountains. This stone can be cut into any desired form with trifling labor, and is said to resist the action of fire as completely as the best fire brick. Should it prove to possess the qualities claimed for it, the cost of erecting furnaces in that region will be materially reduced.

The fifth quartz mill for Reese River is on its way to that silver region, and a large train of freight wagons is on hand for the same locality.

## GENERAL MINING STOCK REPORT.

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending July 18, 1883.

Names of Companies.	Total No. Shares.	Shares per \$100.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$200	2400	2360	2005	2150	2000	2025
Gould & Curry	4,800	4	500	56.5	—	58.0	50.00	—	55.00
Central	1,800	12	200	—	—	—	—	—	—
California	4,800	12	200	—	—	—	—	—	—
Chollar	5,000	4	500	870	900	—	900	900	900
Potosi	2,800	28	500	625	675	—	680	600	—
Hale & Norcross	80	2	500	1900	1925	1900	1800	1900	1010
Sierra Nevada	3,000	1	600	60	61	60	60	—	62
Dancy	5,000	4	500	270	265	260	275	295	81.2
Burning Mountain	4,800	4	100	137½	125	130	120	115	120
North Pole	2,000	1	300	45	—	—	—	—	42½
Rogers, F. D.	3,000	1	250	15	—	—	—	—	—
Meredith	7,200	1	125	51	61	50	55	40	45
Charles Canby	1,800	1	30	—	80	80	80	—	—
Sacramento	1,800	1	500	—	—	80	—	—	80
Lacorne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Sierra	800	1	—	3500	3300	3100	3000	8100	—
Jowa	—	—	—	—	—	100	100	—	—
El Dorado	—	—	—	80	90	60	65	70	—
Norton	1,600	1	—	—	—	8½	8½	7½	8
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	15	10	—	—	11	12
Arctic	—	—	—	—	3	—	3	—	—
Brennan	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel	10,000	1	100	2½	2½	2½	2½	2½	2½
Mount Davidson	10,000	1	200	2½	2½	2½	2½	2½	2½
Pride of the West	—	—	—	115	110	100	100	90	106
G. H. Quarz M. Co.	—	—	—	—	—	—	—	—	—
Imperial	—	—	—	—	425	430	380	400	—
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	1	600	165	164½	167	142½	148	160
Antelope	1,200	1	600	—	—	—	20	—	—
Esmeralda	1,600	1	1000	—	—	—	16	—	19
Real del Monte	4,400	1	400	220	225	220	200	200	—
Delta	1,900	1	100	—	—	—	—	—	—
Utah	1,600	1	250	—	70	60	60	60	55
Silver Hill	5,000	1	500	35½	31	34	50	47	38
Sierra	1,200	1	250	—	—	25	22½	—	22½
Federal Hope	—	—	—	—	—	200	—	—	—
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	—	—	—	—
Falls of Clyde	—	—	—	—	—	—	—	5	5
Sunbeam, s. w. ex.	—	—	—	—	—	—	—	—	—
Bamboo	600	1	500	—	—	—	—	47½	—
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	9	7	7	10½	10	6
Coso	3,600	1	600	—	—	—	—	—	—
Willow Springs	2,700	1	100	—	—	—	3	—	—
Empire	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	1	1000	—	—	—	—	—	—
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	65	66	72½	72½	71	—
Josephine	—	—	—	—	—	—	—	—	—
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	—	—	—	2	2	2	1½	2	—
Utica	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	—	—	—	11	15	—

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, July 16, 1883.

Virginia Mining District.	Bid.	Ask'd	Sierra Nevada	Bid.	Ask'd
Ashtabud	\$ 9	8	Sacramento	\$ 60	55
Allen	50	100	Saratoga	80	91
Altamont	100	—	Texas	—	10
Alturas	3	5	Union	—	8
Belvidere	25	30	U. S. Tunnel	4	5
Birdsall	20	30	Utah	75	100
Budget and Golden Era	41	50	Old Virginia	250	—
Burnside	12	20	Washington	5	8
Burnside	150	100	York	3	5
Burnside	150	100	Zouave	17	20
Beach-Paxton	95	125			
Bloomington	—	—	<b>Gold Hill District.</b>		
Crozes (Buchanan)	250	—	Alpha	500	750
Cedar Hill Tunnel	8	—	Baltic	16	24
Cole	8	14	Bullion	95	100
Commercial	15	20	Belcher	1200	1400
Consolidated Cedar Hill	2	—	Branch Mint	4	10
Dugan	3	5	Caledonia	60	55
Empire	12	20	Coppers	—	35
El Dorado	50	60	Kareka	15	40
Fairview	200	225	Forcade & Ricard	6	8
Grass Valley	70	100	Gold Hill, Big Lodge	50	60
Hazel Green	6	7	Golden Gate	—	5
Harmon, Virginia Incorpor	10	20	Golden Eagle (No. 1)	5	20
Harrison, San Fran. Incorpor	10	20	Hawkeye	20	35
Irvine	15	16	Hudson	200	250
Insurance	30	35	Kob-t-hoor	—	—
Jowa	115	120	Leon	—	60
Ironstiles	5	6	Laboring	12	15
Jadus	10	12	Lacorne	—	18
Jenista	7	10	Mary Ann	—	55
Keosauqua	25	30	North American	—	10
Keweenaw	6	8	North Ophir	—	—
La Crosse	9	10	Overman	225	400
Lacorne	10	12	Oriental	—	5
Monte Cristo	—	—	Omega	—	500
Meredith	45	60	Princess	112	125
Met. Davidson	3	6	Sinola	15	20
Melton	10	12	Sweeney	—	—
Melton	10	12	Stephenson-Kelley	8	9
Milton	—	100	Union	40	45
Monarch	—	—	Yellow Jacket	—	1000
Moligan	15	25	Uncle Sam	2	5
Norton	5	10	Yolo	—	10
Oakland	12	15			
Oakland	3½	8	<b>Devil's Gate District.</b>		
Oscoda	12	15	Governor Nye	15	—
			Hawley	50	—

Pride of Washoe	12	Monterey	7	—
Peyton	26	Pride of the West	145	160
Poorman	175	Whittemucca	6	—
Perseverance	40	Wide West	12	15
Rogers	70			
Rebinder	8			
Santa Rita	25	<b>Flowery District.</b>		
Santa Fe	35	Atwell	3	4
Santa Fe	35	Atwell	3	4
St. George	10	Lady Bryan	7	8
		Harrison	5	6
		Uncle Sam	5	—

## ESMERALDA STOCK LIST.

Our usual Esmeralda letter having failed to come to hand, we continue our last week's quotations.

[Corrected for the Mining and Scientific Press, July 2, 1882.]

	Bid.	Ask'd		Bid.	Ask'd
Alpine	34	10	Keeney	20	—
Amador	—	5	Lave Yankee	—	12
Atlantic	—	—	Lord Byron	7	20
Arctic	6	10	La Placa	7½	12
Antelope	200	—	Main Esmeralda	—	40
Alturas	15	20	Monterey	—	—
Atma	—	—	Mckinstry Tunnel Co.	5	—
Brazili	15	20	Monte Christo, Tunnel co.	—	40
Bodie Bluff Consolidation	8	—	Mutual	—	10
Bodie Peak, Bodie District	—	—	Mount Braley	—	10
Bright Star	10	15	Stacy L. Gardner	—	4
Bamboo	60	—	Mina Real	—	15
Bullion (Van Horn Dist.)	—	—	Meredith	—	15
Bodie Bluff, No. 1	12	15	North Willow Springs	—	30
Bodie Bluff, No. 2	—	5	New Esmeralda Consol.	—	6
Bunker Hill	—	—	Newton	50	—
Bonaparte, Tunnel comp.	5	—	Nevada, (Tunnel)	—	15
Cassian	—	25	Ozark	—	20
Climax	—	10	Old Wagoner	—	6
Crocket	85	100	Paul Tunnel Co.	—	6
Camp	—	5	Pacific	—	20
Clan Alpine	12	20	Pond	—	—
Davis, Consolidation	—	5	Pride of Antelope	10	15
Durbin	—	9	Pern (two ft. to the share)	—	15
Delta	—	8	Peuney-Yvonia Tunnel Co.	6	10
East Ex. Unit	—	12	Real del Monte	—	20
Excelsior, Excelsior Dist.	6	30	Robeca	—	20
Empire	28	—	Red, White & Blue	—	20
Franklin, Tunnel company	10	—	Stanford Tunnel Co.	—	15
Fallstaff	20	—	Schenectady	7	10
Fallstaff, Consolidation	4	5	Strawberry	—	20
Fresno	9	12	Silver Hill	34	—
Falls of Clyde	—	8	Silver Hill, Bodie District	—	7
Great Eastern	15	20	Seymour	25	6
General Hooker (Cons.)	14	25	St. Louis	—	5
General Jackson	13½	14	Turcan	—	3
Garibaldi	—	30	Tiger	—	4
Golden Harvest	—	5	Tucker	—	15
Golden Cross	15	20	Tennessee	12	25
Governor Seymour	—	25	Union Tunnel	20	30
Golden Era	—	20	Ural	—	120
Great Britain	9	9	Ural prospect	—	—
"Golden Era" Tunnel Co.	2	3	Ural [extension]	—	10
Greenback	20	25	William Tell	—	2½
Hauver	—	10	Wide West	—	—
Howard Tunnel Co.	4	15	Washington, Tunnel comp.	—	4
Heath	12	15	Western Summit	—	100
Herman Consol.	15	—	X-Ella and Constantinople	—	1½
Home Check, Excelsior Dis	3	5	Yankee	45	60
Juniata	10	13	Cortes, consolidated	—	30

FINE PAINTING AND TALL CHIMNEY.—A beautiful painting in oil colors of the famous Gould & Curry mill has been on exhibition, the past week, in the show window of Jones, Wool & Co., on Montgomery street. This is one of the most complete establishments of the kind in the world; and the painting is a most superior piece of artistic work. The tall chimney which towers high over the building, is 115 ft. in height, ten feet square at the bottom, and four at the top. It has a handsome cut stone base ten feet high, and is capped in like manner. The chimney is a nice piece of workmanship, and is an ornament to the mill and a credit to the establishment.

RAILROAD BRIDGE.—The Sacramento Bee of the 14th inst. in noticing the progress of the work upon the Pacific Railroad, says the piles for the bridge over the American have already been driven for a distance of 400 feet into the river and that the progress, and the mountains of ready framed timber on the ground and on Front street landing,



## P. M. S. C. O.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting with the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of May, 1863.

July 3d, - - - - - Steamer Golden Age  
July 13th, - - - - - Steamer St. Louis  
July 23d, - - - - - Steamer Constitution

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.  
For Freight or passage, apply to

A. B. FORBES, Agent.

Corner of Sacramento and Leidesdorff sts.

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to flow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

5016-1f ZENAS WHEELER.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

## The Occidental Hotel

IS NOW

Open for the Reception of Guests.

THIS HOUSE HAS ALL THE MODERN IMPROVEMENTS, and will be conducted equal in every respect to the first class houses of the Atlantic cities. The spacious READING AND EXCHANGE ROOMS, have been fitted up with special reference to the comfort and convenience of the public generally, having a

## News Stand,

AND A LARGE

CABINET FOR MINERALS;

ALSO

A Branch Telegraph Office, Connecting with all the lines throughout the country.

LEWIS LELAND CO.,

Proprietors.

San Francisco, Jan. 1st, 1863.

J. F. & H. H. SCHAFER

Manufacturers of and Dealers in

BEDDING AND FURNITURE,

of every description,

Blankets, Comforters, Sheets, Etc., Etc.

Nos. 504 and 506 Sansome Street,

(Near Clay.)

San Francisco.

This Establishment is now generally known to be the Cheapest Place in the City for good Bedding.  
Branch Store, . . . . . Broad St., Nevada.

JAMES PHELAN,

(Late J. & M. PHELAN.)

IMPORTER AND JOBBER,

Wines, Liquors, Etc., Etc.,

Nos. 616 & 618 Front street,

Office of the Nevada Copper Mining Co. March 24, 1863.—At a meeting of the Board of Trustees, held this day, an assessment of Forty Cents per share was levied upon the Capital Stock of the Company, payable twenty (20) cents per share within thirty days, and twenty (20) cents per share within sixty days from this date, to the Secretary. By order of the Trustees,  
J. ARMSTRONG, Secretary.

## THE BRYAN BATTERY.

The vast interest involved in the reduction of area on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

## ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

## METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

## EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

## EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

## BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent. more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the celebrated Onir Company first introduced them into their works in 1850, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps,

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed being cast in sections, when deiced, so that the mills can be packed over any mountain road.

We annex the names of few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley, San Marcial Co., Mexico.

John D. Winters & Co. Esmeralda,

Crown Point Co., Gold Hill,

Potosi Mining Co., Virginia City,

Tajo Mining Co., Mexico,

Sheba Mining Co., Humboldt.

Lotta Mills Co., Coso.

American & Mexican Co., Mexico.

San Carlos Mining Co., Owen's River,

Union Quartz Co., Aurora,

Triunfo Mining Co., Mexico,

Napa Quartz Co., Aurora,

Petaluma Quartz Co., Gold Hill,

Francis Mellus & Co., Slate Range,

W. R. Churchill & Co., Mexico,

Willow Springs Co., Coso,

Hews, Howe & Co., Rich Gulch Flat,

F. A. Benjamin & Co., Mexico.

O. J. Parker & Co., Nicaragua,

Gibbons & Clayton, Esmeralda,

Smith & Clouser, S. F. Reduction Works.

Amagoza Mining Co., San Bernardino,

## MANUFACTURED ONLY BY

GODDARD & CO.,

At the Pacific Iron Works,

SAN FRANCISCO.

on 125 to 136 First street, and 126 to 144

Fremont street.

P. DONAHUE. H. J. BOOTH. C. S. JIGGINS.

## UNION

IRON AND BRASS FOUNDRY.

(The First Established in the State.)

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

HAVING ADDED TO THE SEVERAL Departments all the recently improved Tools, this Establishment is now the most Extensive and Complete of any on the Pacific Coast.

The undersigned are prepared to furnish, at short notice, Locomotive, Marine and Stationary Engines, of every size and description.

## BOILERS.

Locomotive, Flue, Tubular, Upright and Cylinder, furnished with or without engines, complete.

Machinery and Castings of every description, Saw-mills, Grist Mills, Car Wheels, Derrick Irons, etc.

QUARTZ CRUSHING BATTERIES,

Embracing a great variety of Stamp, Mortar and Cam Patterns

AMALGAMATING MACHINERY,

Varney's Improved Patent Pans and Settlers, Wakely Pans, Amalgamating Tubs, Plaided's Grinders, Chile Mills, Concentrators, etc., etc.

## MINING PUMPS.

Cornish, Lift and Force Pumps, from four to eight feet stroke, with Pipes, Bob Mountings, and Gearings complete.

## HOISTING DRUMS.

For Shafts or Inclines, with clutch, friction or V cones. Sole Agents and Manufacturers for the Pacific Coast, of C. and G. M. Woodward's Celebrated Patent Safety Steam Pumps and Fire Engines.

All Contracts and Orders executed with promptness and dispatch, and at reduced prices for Cash.

je21 DONAHUE, BOOTH & CO.

## Giffards Injectors,

FOR SUPPLYING BOILERS WITH FEED WATER without Pumps. No Mill or Mining Company should be without one of these valuable Instruments. Send for a Circular.

DAVID STODDART, Agent,

je22 Cor. Pine and Front Sts., San Francisco.

## I. C. E. KLEPZIG &amp; CO.,

## GUN MAKERS,

...AND...

DEALERS IN GUN MATERIALS,

733 Washington street, San Francisco,

[One Door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.

Gilding, and also Silver Plating, by E. Ekland. je21

## CORNELL'S

## EXCELSIOR GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the undersigned is now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

## CARD PICTURES.

As I have every facility for producing these beautiful pictures, in all their different varieties, I have reduced the price to

\$3 PER DOZEN AND \$2 PER HALF DOZEN!

Large size Photographs. \$3—Extra copies \$1 each.

AMEROTYPES in all Styles and Prices.

OLD PICTURES copied with care and accuracy, in any style desired, Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist.

je22 R. H. CORNELL.

## BAUNCHEIDTISM,

THE PRESERVER AND PRODUCER OF LIFE.

THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF curing disease, is a "fait accompli" in medicine, and needs no more proof. The public has crowned Bauncheidtism already with an extraordinary patronage, and it is acknowledged by all men of sense that BAUNCHEIDTISM is founded on a rational, scientific basis.

It can safely, and with sure success be applied to paralysis in consequence of Apoplexy, Podagra and Rheumatism of every description, which kind of complaints can find their only relief by the above method.

Especially can it be applied successfully, in the spring of the year to diseases of the eye.

Dr. Borchers is the only doctor in California who has the original series of Dr. BAUNCHEIDT and his original oil. Dr. Borchers is also in possession of original letters of the inventor of the method by which he can prove that he is perfect master of the art.

DR. J. C. BORCHERS.

No. 19 Kearney street, and No. 4, Mark's Place, First story, No. 5. Office hours from 9 to 11 A. M., and 1 to 4, and 7 to 9 P. M. je 21

## REYNOLDS'

Patent Cut-Off and Governor FOR STEAM ENGINES.

127 of these Invaluable Machines,

ARE NOW IN USE

In California and Nevada Territory, giving a perfect regular motion and Saving 20 to 65 per cent of the Fuel.

## Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to be used, and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street San Francisco.

## Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the dan per is put in.

## Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the common ratchet, and when small holes are wanted, can be done four times as fast. The handle can be worked in any direction.

## Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.

## Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the low market rates.

## Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years.

Refer to—Sugar Refinery, San Francisco, Cottell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States.

## E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

## MINING &amp; SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES

A new volume of this extensively circulated publication commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper published.

## The Mining Interest!

Will find it of great value, as it will contain all the news pertaining to Mining, the prices and sales of Mining Stocks, new inventions, Machinery adapted to the purpose, and of every thing generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietors having by great experience as Patent Agents, together with facilities at Washington that enable them to obtain faster with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its columns will from time to time contain original engravings of new machines and inventions, together with large amount of reading matter pertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest our readers.

## To Chemists, Architects and Millwrights

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Fishers will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers.—Four Dollars per annum

Club Rates.

Five Copies for Six Months, \$3.

Ten Copies for Six Months, \$15.

Fifteen Copies for Twelve Months, \$30.

Twenty Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2 50. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

SWER & SMITH, Publishers

Room 27, (formerly) U. S. Court Building, Corner Washington and Battery streets, San Francisco



**DESKS**  
AND  
**Office Furniture,**  
OF ALL KINDS.....FOR SALE BY  
**JOHN WIGMORE,**  
No. 423 CALIFORNIA ST., SAN FRANCISCO.  
OFFICE JOBING, of all kinds, attended to.

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19, First Street, San Francisco,  
Furnish Castings and Machinery of all kinds

ALSO:  
**GENUINE WHITE IRON SHOES AND DIERS.**  
**PALMER, HANSCOMB & CO.**  
**To Quartz Miners.**  
Knox's Improved  
**AMALGAMATING PAN,**  
WITH  
**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.  
By its use is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be other wise lost. Made exclusively by  
**PALMER, HANSCOM & CO.,**  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted to the undersigned upon Steam Chest False Bottoms for the inclose of Amalgamating Pans or Tubs, and are cautioned against making, buying, using, or selling the same without his consent.  
W. A. PALMER.

**T. C. Sanborn & Co.**  
**STOCK BROKERS,**  
No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**  
**GOULD & CURRY MINING STOCK,**  
**CHOLLAR MINING STOCK,**  
**CALIFORNIA STEAM NAVIGATION CO'S STOCK,**  
**BOUGHT & SOLD.**

**DEETKEN'S**  
**Chemical and Metallurgical Works,**  
On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS.  
Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose.  
nov 8-3m

**LEWIS COFFEY AND RISDON,**  
**STEAM BOILER AND SHEET IRON WORKS.**  
The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.  
Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
**LEWIS COFFEY** **J. N. RISDON.**

**THEODOR KALLENBERG**  
**Maker of Models**  
**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Ramps, Dies and the Sinking, Embossing Stamps.**  
Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
(7.3m) San Francisco.

**R. W. FISHLBOURNE,**  
**PRACTICAL LITHOGRAPHER,**  
**ENGRAVER AND PRINTER,**  
No. 549 CLAY ST., CORNER OF LEIDSDORFF.  
San Francisco, State and County Bonds, Stock Certificates, Bills of Exchange, Bills of Lading, Bank Checks, Lithographs, Architectural and Marine Views Show Cards, Labels, Etc., executed with neatness and dispatch. N. B. All orders in Crayon Work promptly attended to.

**MINING.**  
N. B. Mining Stock Certificates executed with promptness and dispatch, and at greatly reduced rates. jy6

**MARTIN & Co.,**  
OFFICE--224 Montgomery Street, Up Stairs,  
WILL CONTRACT FOR THE  
**Purchase of Copper Ores,**

Assaying 8 per cent and upwards of Copper to the Ton. We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.  
Scales will be furnished and Freight Paid on all consignments if desired by the consignors.

**HENRY MARTIN,** **J. F. GREENMAN,**  
New York. San Francisco,  
San Francisco Post Office, Box 1569.  
je 1.

**Tremont House,**  
418 and 420 ----- Jackson Street,  
[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.  
The House is conducted on Temperance Principles, WHICH SECURES TO OUR GUESTS QUIET.  
The prices for board and Rooms are very moderate—by the day, meal or week. We solicit a call from ALL.  
**F. E. WEYGANT, PROPRIETOR.**

For the accommodation of my many guests I have taken and refurbished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.  
**F. E. WEYGANT.**

**LEANDER RANSOM,**  
**Civil Engineer**  
AND  
**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO  
**STATE LOCATING AGENT.**

And as such having the sale of  
**600,000 ACRES OF STATE SCHOOL LANDS,**

**At the low price of \$1.25 per Acre.**  
Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct 3m

**DR. H. AUSTIN,**  
**DENTIST,**  
No. 634 Washington street,  
Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The clearest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices.  
je-29

**To Mining Companies.**

**FOR SALE—A STEAM ENGINE AND BOILER.** THE Engine is 30 horse power—10 inch cylinder—24 inch stroke—solid iron frame, with heater, pumps, etc., all complete. The boiler has 5 flues, is 24 feet long, 40 inches in diameter, made up from the best three-eighths inch Low Moor Iron, and weighs about 5000 pounds.

Both Engine and Boiler are in perfect order and fully guaranteed. Apply to  
**I. H. HAM,** [No. 211 Clay st.  
San Francisco, June 13, 1863. 3t

**International Hotel,**  
JACKSON STREET, ----- SAN FRANCISCO  
[A few doors above Montgomery.]  
**FIRE-PROOF BRICK BUILDING.**  
Most convenient to the  
Steamer's Landing, Business and Places of Amusement  
**OPEN ALL NIGHT.**  
City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**  
and SETS AS GOOD A TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.  
**F. E. WEYGANT, PROPRIETOR.**

**John R. Sims,**  
  
Oregon street, between Washington and Davis and Front and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and Shutters,** Bunk Vaults, Grating, Cemetery Railings. All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

**Mr. Sims Appreciates the Past** liberal patronage of his friends, and trusts that he may continue to merit it in the future.

**For the Information of Strangers** he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attests. A large assortment of second hand shutters for sale at low rates. apis

**NATHANIEL GRAY,**  
**General Furnishing Undertaker,**  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

**FULTON FOUNDRY & IRON WORKS**

**HINKLEY & CO.,**  
MANUFACTURERS OF  
**Steam Engines,**  
QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,  
**FIRST STREET,**  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*All kinds of IRON and BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done. PATTERNS MAKING in all its various forms. Prices low.  
**D. B. HINKLEY.** **WM. E. WORTH.** **WM. A. FIELD.**

**W. T. & J. GARRATT,**  
**City Brass and Bell Founders**  
Cor. First & Market sts., San Francisco.

**BABMET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS OF ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."**

**SQUARZA'S PUNCH.**  
**FIRST PREMIUM**  
AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.

ALSO; **FIRST PREMIUM**  
At the San Francisco Bay District Agricultural Fair, 1863  
MANUFACTURER, WHOLESALE AND RETAIL,  
No. 44 Leidsdorff street,  
Opposite the What Cheer House, San Francisco.

**San Francisco Machine**  
.....AND.....  
**IRON WORKS!**  
Northeast corner Fremont and Mission Streets.

**ALL KINDS OF MACHINERY MADE TO ORDER ON** at reasonable terms.  
Steam Engines, High and Low Pressure; Quartz Mills, Saw Mills, Mining Pumps, Holding machines for mining purposes, Wine Presses, Agricultural implements etc, etc, and Castings of all descriptions made to order.  
Steam Engines exchanged and for sale by  
**DEYOE, HINSMORE & CO.**

**REPAIRING** promptly attended to.  
**FOR SALE.**  
One Upright Post Drill, Putnam's manufacture, Also one thirty-inch screw Chuck.  
San Francisco, July, 1853. je13

**50 lbs. MARINE and**  
**Fire-Proof Paint,**  
MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever affect it, and cheaper than any other paint.

**DIRECTIONS:**  
For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**  
When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**  
**HOUSE:**—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil; if a lighter color is wanted, mix less paint, more lead.  
**ROOF:**—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
G. T. FOUQUE, Superintendent.  
**WORKS, North Beach; Office, 509 Sacramento st., San Francisco.**

**WRIGHT'S PICKS.**  
**JOHN WRIGHT,** of Sacramento, has established himself in San Francisco, for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name.  
**JOHN WRIGHT,** 511 Market street, Opposite Battery, San Francisco.

**WANTED,**  
**GOLD QUARTZ SUITABLE FOR**  
**CUTTING JEWELRY,**  
By **FRONTIER A. DEVIEROY,**  
Is ap 487 Pine street, San Francisco.

**FREDERICK MANSELL,**  
**MECHANICAL & ARCHITECTURAL**  
**DRAUGHTSMAN,**  
No. 422 California street, corner of Leidsdorff  
Drawings of MODELS made for parties applying for patents at Washington or London. mar 23 2m

**HAYNES & LAWTON,**  
IMPORTERS AND DEALERS IN  
**CROCKERY,**  
**GLASS WARE,**  
**FRENCH CHINA,**  
**Coal Oil Lamps, Table Cutlery**  
**CLOCKS,**  
**Silver Plated and Britania Ware,**  
**ETC., ETC., ETC.**  
**NO. 516 SANSOME STREET,**  
[CORNER OF MERCHANT.]  
SAN FRANCISCO.



## CALIFORNIA TOOL WORKS!

John Weichhart,

Manufacturer of

All Kinds of Edge Tools, Etc.,

Plane Irons

Moulding Irons,

Stone Cutter's Tools, etc

No. 22 Fremont street, bet Market and Mission,  
San Francisco, July 14, 1863. jy 20

CHARLES GEDDES,

ARCHITECT,

Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms.

jy 20 San Francisco

MOYNIHAN &amp; AITKEN,

Boiler Makers and Blacksmiths,

Mission, between Beal & Fremont Sts,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms. jy 29

L. F. LELAND,

STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board  
je 29

MYERS &amp; DAGGETT'S

Mining and Stock Exchange,  
No. 23½ B Street, Virginia City, N. T.

Mining Stocks of All Kinds Bought &amp; Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to

\*.\* Abstracts of Titles Furnished, Etc.

AGENCY

For the Purchase and Sale of  
MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.

je 13

Wm. FAULKNER.

SOUTH PARK

Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO.,  
Office in Shiel's Block, opposite Masonic Temple.  
je 13 S. F. CLOUSER, Secretary.

WILLIAM BRODIE &amp; CO.,

CALIFORNIA FOUNDRY,

Fremont Street, near Market, San Francisco.

Light and Heavy Castings,

Of Every Description, Made to Order. Particular attention paid to all kinds of House Work, Plumb and Ornamental. jy 13

D. MORRIS,  
MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

WARRANTED FIRE-PROOF SAFES  
Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. je 13

## REMOVAL.

OFFICE OF THE PACIFIC METAL  
Surgical Office is removed to 509 Sacramento street Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

H. C. KIBBE,

MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

EXCELSIOR IRON WORKS,

712 Sansome street,

Between Sackson and Pacific, San Francisco.

GALLAGHER &amp; KENNEY,

Manufacturers of all kinds of

Architectural and Ornamental Iron Work,

Bank and Store Vaults, Safes, Doors, Shutters, Bal-

cony, Area and Cemetery Railings, Gates, Stairs,

Etc. and all kinds of Blacksmithing and Job-

bing done with promptness, and at

Reasonable Prices.

Orders from the country promptly attended to.

je 13

## APARTMENTS.

FURNISHED APARTMENTS, WITH OR WITHOUT  
Board, at 1013 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
home will do well to apply. jy 6

E. C. DAKE,

DEALER IN

CLOTHING,

AND

Gentlemen's Furnishing Goods;

ALSO

HATS, CAPS, ETC.

AT THE NEW YORK CLOTHING STORE,

541 &amp; 543 Washington st. Montg'my Bk

je 1

Old No. 145.

[29]

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY

PEASE, BOWLEY &amp; CO.,

Real Estate, Stock and Exchange

BROKERS,

621 Montgomery street, San Francisco.

LEGAL TENDER NOTES AND MINING STOCKS,

BOUGHT &amp; SOLD.

je 29

PUMPS!

HARRISON'S

California Lift and Force Pump,

WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire Engines, Wrecking or Irrigat-  
ing. This is the Cheapest, Lightest and most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

ALL SIZES;

Capable of throwing from ONE HUNDRED TO FIVE  
THOUSAND Gallons per Minute—For sale by

C. H. HARRISON,

PHOENIX OIL WORKS,

je 15

517 Front Street, San Francisco,

New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED  
Agents for the above Company, are receiving regu-  
lar supplies of their superior manufactures of

SHEATHING COPPER;

BRAZIER'S COPPER;

COPPER BOLTS;

YELLOW SHEATHING METAL;

COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market  
rate, and on the most favorable terms.

je 29

MORGAN, STONE & CO  
108 Front Street, San Francisco.

Napoleon Copper Mining Company.

Capital Stock.....\$1,620,000.  
2,700 Shares—\$600 Per Share.Length of Lead 2,700 Feet: Location of Mine, Gopher  
District, Calaveras County: Incorporated  
October 8, 1862.President.....F. MACCRELLISH  
Secretary.....Q. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....RICHARD POWNING

TRUSTEES.

F. MACCRELLISH, of Alta California  
M. ERLBACH, of Greenberg, Eriehach & Co.  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. LUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department.  
J. W. TICKER, of J. W. Ticker & Co.  
W. A. WOOLWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers,  
Office of Company, No. 420 Montgomery street.  
je 29San Antonio Gold and Silver Mines,  
LOWER CALIFORNIA,

FORWARDING &amp; MINING AGENCY.

SAMUEL SMITH,

OFFICE—North West Corner of Front and Clay  
Streets, San Francisco.MINING MACHINERY AND MERCHANDISE FOR-  
warding Claims secured, through the  
resident Agent at San Antonio, and information fur-  
nished regarding any claim, in that Territory, on Com-  
mission. je 26

PEOPLE'S

Steamship Line!

Connecting California and New York

VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

MOSES TAYLOR,

J. H. BLETHEN.....COMMANDER

Will be dispatched for

SAN JUAN DEL SUR,

From Mission street Wharf.

THURSDAY, - - - - JULY 23, 1863.

Punctually at 9 o'clock, A. M., on

Connecting at GREYTOWN with the Splendid Steamship

AMERICA.....2500 Tons.

Reduced rates of Passage and quick trips are secured  
by the re-opening of the Nicaragua Route.  
These Steamers are unsurpassed for speed, cleanliness  
and safety, and every effort will be made to insure the  
comfort of passengers.

For further information apply to

I. K. ROBERTS, Agent,

FOR SALE.

PATENT PRESSED RUSSIA IRON MINING PANS.

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Bolts; Iron Rivets; Etc.

We are also manufacturers of the

UNEQUALLED  
MONITOR COOKING STOVE  
OR RANGE,

FOR HOTELS.

To which we call particular attention.

je 29

TAY, BROOKS &amp; BACKUS.

The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF

COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,

LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined  
with Silver and Copper Ores, and advances made there-  
for.Parties owning undeveloped mines and desiring capital  
to prospect the same will receive assistance, if, upon ex-  
amination, such leads are deemed sufficiently valuable  
to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,

Montgomery Street, San Francisco.

ASSAYS!

Promptness and Accuracy Secured

BY THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!Advantageous Terms for Prospector's Clubs  
and Mining Companies.

J. H. CHURCHILL, M. A.,

(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. jy 6

A. C. MORSE,

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts. Aurora.

HAVING MADE ARRANGEMENTS  
with MINER S. MARTIN Esq., one of the principal  
Stock Brokers of San Francisco, I am prepared to BUY  
and SELL every description of Mining Stocks in Esme-  
ralda District

Miners' Foundry

—AND—

MACHINE WORKS,

First St., between Howard &amp; Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHIN-  
ery, the Best and Most Economical, manufactured  
in the state of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:Steam Engines and Boilers, Flour, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts  
Etc., Etc., Etc.Particular attention will be given to the manufacture  
of Machinery in Sections designed for places of difficult  
access. Various models of Quartz Crushers, Amalgam-  
ators and Water Wheels—some in operation and on exhi-  
bition.\*.\* Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere.HOWLAND, ANGEL & KING  
San Francisco, February 23, 1863.

New Patent Agency.

WE HAVE CONNECTED WITH THE

Publication of the "MINING AND SCIENTIFIC PRESS"

The Patent Agency Business,

And would invite Inventors and Discoverers on the Pa-  
cific coast, who wish Dispatch as well as Economy to call  
upon us. We have an Experienced Agent at Washing-  
ton, which, together with our own experience of several  
years, renders the

Mining and Scientific Press Agency

The most desirable place to make application for Letters  
Patent on the Pacific coast. Apply atOffice of the "Mining and Scientific Press," Room  
No. 27, Federal Building, corner of Battery and Wash-  
ington streets, (directly opposite the Post Office,) San  
Francisco.

EWER &amp; SMITH.

FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building  
EWER & SMITH, Solicitors.

NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this  
Office, Room No. 27, Federal Building. Terms moder-  
ate.

EWER &amp; SMITH.

PATENT RIGHTS.

Patent Rights Bought and Sold,  
At the office of the "Mining and Scientific Press" Agency  
EWER & SMITH.

IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office  
can have their Inventions illustrated and described in  
the columns of this paper FREE of charge, they merely  
furnishing the engravings. We are also prepared to fur-  
nish engravings at reasonable rates. Those who do not  
care to go to the expense of having engravings prepared  
can have their Inventions fully noticed and described in  
our columns, free of charge. The free use of our col-  
umns to aid them in introducing their inventions to the  
public will be found a most important advantage to in-  
ventors.

EWER &amp; SMITH.



# Mining and Scientific Press.

W. B. EVER, EDITOR. } A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC. { EWER & SMITH, PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, JULY 27, 1863. NO. 39.

## TREATMENT OF SULPHURETS.

Plattner's Chlorine Gas Process for Treating Auriferous Sulphurets, as Employed by Mr. Deetken, at his Metallurgical Works, on the San Bruno Road, near this City.

We had the pleasure, a short time since, of paying a visit to the Metallurgical Works of Mr. G. F. Deetken, on the San Bruno road, about two miles south from this city. Mr. Deetken has established himself at this point which is convenient of approach, both by land and water, for the purpose of working auriferous sulphurets, after Plattner's well known process, but by mechanical appliances of his own invention. By this process, Sulphurets or pyrites, are worked to within an almost unappreciable percentage of a fire assay. Sulphurets have been brought to these works after they have been once worked, (imperfectly, however, as they always will be in unskilful hands,) and afterwards submitted to the most careful and elaborate pan process for amalgamation. The same sulphurets, so treated, have subsequently been submitted to treatment by Mr. D. with a result more remunerative, even, than that first obtained at the mill.

Mr. D. has made this business a subject of much study and experiment, the result of which has been the reduction to practice, on a large scale, of the well known laboratory process of dissolving gold with chlorine gas. Hence the process employed by him is known as the "Chlorine Gas Process," instead of the "Hydrochloric Process," as stated in a previous issue of this paper.

### DESCRIPTION OF THE PROCESS.

The sulphurets when received at the Laboratory are roasted at a red heat on a reverberatory hearth, until they are completely desulphurised, and the arsenic, if any is contained, is pretty effectually driven off. This operation requires from 10 to 24 hours, according to the nature of the material to be operated upon, the ore losing about 30 per cent. of its original weight by the operation. When the roasting is completed, the ore is removed from the hearth to a tank, where it is slightly moistened. After remaining a proper length of time in this condition, it is again removed to a large vat, capable of containing from three to four tons of the roasted sulphurets. This vat is constructed after the manner of a filter, and is filled with the ore to within about six inches of the top. A cover of wood is then placed upon the cistern and carefully luted to render it, as nearly as possible, gas-tight.

The vat, thus prepared and charged with the ore, is now ready for the introduction of the chlorine gas, which is manufactured the usual way, and passes into the vat beneath the ore. The gas soon finds its way into and through every part of the entire mass of ore, and of course, comes in contact with every particle of gold, however fine, which, the desulphurising process of roasting has liberated from its mechanical and chemical connection with the iron, sulphur and arsenic, in their several combinations. By this process every particle of gold thus liberated, is changed into a chloride of gold. When the impregnation is fully completed, the cover of the vat is partially lifted and a stream of water turned upon the top of the ore, covering it to the depth of about six inches. This water immediately commences percolating downward through the mass, dissolving in its

passage, the chlorine of gold, which it takes along to the bottom of the vat, through the filter, and is discharged through any convenient orifice, into a leading trough which deposits the liquid into a number of carboys conveniently arranged for its reception. The gold thus held in solution is then precipitated by sulphate of protoxide of iron. Water is continually being passed through the mass of ore in the vat until the test tube shows that it no longer brings away gold. The test is very simple and will not fail to detect the smallest appreciable quantity of gold, even in a large quantity of water.

The above process is both simple and effectual, and may safely be pronounced the most perfect and simplest mode of extracting gold from sulphurets yet introduced into this State. Persons interested or curious in such matters will be pleased with a visit to, and an examination of these works. Quartz miners will do well to call upon, or otherwise communicate with Mr. Deetken, upon this matter. There are but few mills in the State working auriferous rock, who will not find it to their advantage to have their sulphurets for treatment, under this process. Mr. D. will take pleasure in showing visitors through his works, explaining the *modus operandi*, etc. He will also exhibit, in operation, an approved apparatus for separating the sulphurets from the ore; at the mill, and for a cost of, from \$50 to \$100, will furnish said apparatus and provide experienced parties for setting up the same, at any mill, where the proprietors may be desirous of concentrating their sulphurets. Neither power nor clean water are required to operate it.

Mr. D. is now making arrangements for working silver ores, a full notice of which, will be made as soon as the necessary improvements have been completed. It may be proper, in this connection, to state that the process employed by Mr. D. for extracting gold from its ores is not applicable to silver.

**GREAT SALT MINE.**—It appears from scientific investigations that the salt deposit at New Iberia, Louisiana, is of the most extensive and wonderful description, rivaling, in all probability, both in extent and purity, the famous, though recent discoveries in the Humboldt region. A late account says:—"Imagine, if you can, the granite of Massachusetts, or the marble of Vermont, to be solid deposits of pure rock salt, clean and transparent as so much clear white ice, in one solid, inexhaustible mass, underlying the earth, and you than acquire an imperfect idea of the vastness of this salt formation."

**A GOOD SUMMER'S WORK.**—The La Porte Mountain Messenger of the 18th inst. says that the Campbell brothers of Chandlerville, near La Porte, took out about \$4,000 at their first washing in May; cleaned up again about the first of July, taking out \$9,700; and expect to take out as much more at the close of the season. In addition to this over a thousand dollars was taken out of the sluices in the spring. Altogether, this makes a pretty good summer's work.

**SOLDIERS' VOTE.**—The roll of the soldier's names entitled to vote at the next general election, in this State, has been filed in the office of the Secretary of State. It is two hundred feet long and contains about 8,000 names.

## THE INTERIOR OF THE OPHIR MINE.

The local reporter of the Territorial Enterprise, paid a visit to the Ophir mine, on the 14th inst. ant, one day before the recent extensive "cave." We give the following extracts from his report of that visit:—

We entered the "north mine" through a tunnel in the vicinity of Ophir office, and traversed it through endless drifts and shafts, and climbing down from level to level, on dizzy and uncertain ladders, which seemed to rest on solid darkness. We even saw the "Ophir horse," which has gained such celebrity on the Pacific coast, and we cannot say that we were altogether satisfied with it. \* \* \*

We saw the old Virginia ledge, also, where it is cut in a tunnel, and there is nothing in it—not even quartz. And we saw a very curious thing, in the shape of a broad ledge of red, rotten quartz, running east and west, straight across the Comstock vein! It contains a trace of silver—about twelve dollars to the ton. Here and there, in the countless chambers of the north mine, excellent ore is found, but as a general thing, the lead is not near so rich here as it is further south. We went down to the fifth level, and passed under the Spanish mine, reached the main Ophir south of it. Here, vast quantities of first, second and third class rock are being excavated, day and night. A drift has been started, for the purpose of striking the rich streak of ore recently found in the Spanish mine; it will have to be carried fifty feet further before the object can be accomplished. A weary descent of an apparently bottomless staircase, brought us to the lowest gallery—the sixth. It was sloppy in some places, on account of the stream of water struck in the back ledge, four or five months ago, and which continues to flow in considerable volume. From this depth—313 feet below the surface, Mr. Wilder sunk a shaft a hundred feet deeper, but struck water, and had to abandon it. The Latrobe tunnel, however will drain it before long. The Ophir mine is in superb condition, and under the watchful care of its officers, all its concerns proceed with the smoothness and regularity of a faultless machine.

It may not be out of place in taking this "inside view" of the Ophir on the 14th., to take a review of the same ground as it appeared the day after

### THE LATE CAVE.

At half past 10 o'clock, on the morning of the 15th inst., 50 feet, in length, of the Mexican mine, from top to bottom, (215 feet,) caved in—that is, the opening, made by drifting out the vein was closed up by the top wall falling in upon the bottom wall, of course, crushing down the timbers. A small portion of the Ophir, adjoining the Spanish—50 feet of the fourth gallery—also caved with the latter. The lower gallery of the Ophir, as we understand it, is still in good order, and persons can pass from the northern to the southern Ophir, directly under the entire cave in both mines.

The Mexican Company will be obliged to sink a new shaft through which to work their mine, while the Ophir will not be inconvenienced beyond the necessity of cleaning out a little rubbish, which will occupy a small portion of their force five or six days.

The cave, it is said, had been expected for several days, and might have been avoided by filling up a portion of the open space with rubbish, which would then have acted as a pillar, of large extent, and been an ample and permanent support for any weight that could have come upon it. The two extensive caves, which now have occurred on the Comstock ledge, the first, some months since in Gold Hill, and the second one in the Mexican mine, should operate as a caution for properly securing the extensive workings which are now being opened in that region. Large caves, like the two alluded to, can always be avoided by a mere modicum of forethought and precaution.



## MINING CORRESPONDENCE.

NOTES OF A TRIP TO SLATE RANGE via LOS ANGELES AND EL PASO.—No. 7.

MESQUIT SPRINGS, JULY 1, 1863.

Mr. A. McPherson, of the Slate Range Mill Co., formerly at 426 Davis Street, in your city, spent a portion of last Friday with me, on his way to San Francisco. I learn from him that the mill is now in complete running order, but water is so scarce they cannot make full time, until they receive and lay down the pipes to bring in the water from another spring near by.

## ANOTHER IMPORTANT DEVELOPMENT.

This company has fully demonstrated the fact, that the grease-wood, which is abundant every where on the desert, is a first rate material for making steam. This fuel produces such an intense heat, that steam can be raised and the entire machinery of the mill started in fifteen minutes! Steam can be easily kept up by the labor of one man employed to break up and shovel in this fuel.

The importance of the discovery, to this region, can scarcely be estimated. Up to the time of making the above experiment, all calculation for steam power had been based upon the supposed necessity of contracts of from \$35 to \$40 a day for wood to be hauled a distance of some sixty-five miles. Failing to find any one to take a contract even at such terms, the Company, as a temporary alternative, took their own team and went to work hauling in the grease wood with the above result. The total expense will not exceed \$25 per day.

## SALES OF FEET.

The first sales of mining ground in El Paso District, was made on the 28th of May last, at the office of C. W. Tappan, Mesquit Springs. 1240 feet on eight different lodes, changed hands for the sum of \$1,000. All concur in the opinion, that \$5,000 would have been a nearer approximation to their value; but the young man who sold, had his mind set on a connubial engagement, which was to be consummated about the 4th of July, and was determined on selling. Since that transaction, several other sales have been affected, at at prices ranging from 50 cts. to \$6 per foot.

I intend to give in this paper some data in regards to labor to be expended in opening these mines, that I judge will be interesting to working men of small means. We all realize the importance of labor in developing our claims, and feeling our helplessness, for want of means and strength, we are willing to divide with those who feel disposed to furnish those means and help. Holders of the best claims in the district, now offer one half they hold to parties who will sink shafts on them so as to determine whether they will pay to expend further labor on them. Messrs. Keller & Banning, capitalists of Los Angeles, have taken from fifteen to twenty leads in that way, and have opened some of them, but have suspended operation from different causes. First, they had about twenty-five Mexicans, at about \$25 per month and found, and three or four Americans. The Mexicans soon became disgusted with the excessive labor under the burning sun, at climbing from five to eight miles to their work every morning, and the small pay.

The Americans were affected in a similar manner, and went to prospecting, finding that they could make more in a day at that, than they could in months in the tunnels. The manager, Capt. Moore, has gone down to Los Angeles to make a new start. They will make a rich thing of it, if they go on; provided always, the lodes are valuable, and if they are not, a great many experienced miners are most egregiously sold.

I wish the fact promulgated, that these opportunities are open for working men who can raise sufficient means to bring mining tools, provisions and strong muscles into the district, say in August or September. Say three units, with \$100 each, buy provisions and tools for three months, as per memorandum, in my last letter. The cost will not exceed \$15 each, to Los Angeles, besides freight. Then they can put their freight on a wagon, at five or six cents a pound, and walk out as we did, living on our own provisions, and thus, less than \$20 dollars will land them here. When they arrive, they can look at the mines and go to work, or they can prospect for awhile and see which will pay them the best.

There is a party, talking about putting up quartz machinery

on a water power at Tahachapa, and another is talking of putting one up here. We have millions of acres of greasewood, with which the Slate Range Mill Co. are so pleased. We have also plenty of water, and at Grape Vine Springs, eight miles South, there is a sufficiency for six mills, with an abundance of fall.

Mesquit Springs is nearly the centre of the district; while Laurel Hill, fifteen miles North, at the northern extremity of the district, may have the richest lodes, but fuel and water are scarce.

I have sent to Laurel Hill for specimens from the leads which have been opened there, to forward to you, and hope to get them soon.

There is a splendid water-power at Oak Creek, forty-five miles South, for half-a-dozen mills, and plenty of fine timber.

July 5th.—Yesterday morning I started by moon-light, at four o'clock in the morning, and walked to Laurel Hill. I applied for specimens, but the miners hesitated to furnish them, as they preferred to wait till they go down on the leads. They are now doing only the days work required on each claim to hold them. I succeeded, however, in securing a few, which with others from this district, I will send you by first conveyance.

C. W. T.

In connection with the above letter, we compile the following from a letter from an occasional correspondent of the *Bulletin*, of this city, and published in that paper on Wednesday, last:

## EL PASO DISTRICT.

Late assays of ore from El Paso District gives as follows: Of the Ophir, \$1,155 per ton of silver; Laurel, \$200 silver and \$76 gold; Newport and La Plata, \$370 silver; Montville, \$175 silver. Various other leads in this district give about the same as the Newport.

## SLATE RANGE DISTRICT.

In the Slate Range district, the Antrim has assayed all the way from \$500 to \$3,000 silver. Several tons of ore from this lead have been shipped to San Francisco, which paid big. Of the Kenebeck, which is near the Antrim, no assays, I believe, have been made very lately—at least no returns have been received here. Those made, some time since, gave \$300 in silver per ton. The croppings of this lead are said to be 60 feet wide. The Rockland lead gave, from a select specimen, \$2,700 silver per ton. The Albany, owned by Seales & Co., who have a mill on the ground, is paying well—gold. The Knoxville has hundreds of tons of ore on the surface that will pay \$200 to \$400 gold. The Portland—silver lead—promises well. The Comet, a spur of the Kenebeck, and the Robert Emmet, both yield excellent rock, and are thought to be rich.

## THE COLORADO RIVER MINES.

At El Dorado Cañon, on the Colorado river, the principal lead is the Teschalticup, which, as I wrote you long ago averaged from five assays over \$2,900 per ton, as they get down on the lead. The Monitor, in the same district, assays from \$700 to \$1,200 silver. There are other leads in the cañon equally rich with the Monitor, but I cannot give the figures. The Rock Springs district and the Chimawayo district, further down the river, have demonstrated to contain rich leads; definite results I have not at hand. The Apache Chief Copper lead, still further down, near La Paz, is exceedingly rich, assaying, I understand, 85 per cent. of copper and \$105 of silver to the ton. It has been opened up, and the ore is to be shipped to San Francisco. It is about 30 miles from the river—beyond. The Salizar and the Scotty leads, near La Paz, are also rich.

## OTHER MINING DISTRICTS.

The copper mines of San Antonio, just over the line in Lower California, are very valuable, as they are near water transportation, being only 7 miles from Enciendita Bay. They assay 34 per cent., and 20 per cent. ores, it is said, will pay. The owners already have nearly 100 tons ready for shipment. I believe a schooner is now on the way down there for a cargo of the ore to take to San Francisco.

ACCOUNTED FOR.—It has been noticed that the number of marriageable young women coming overland, this year, is much smaller, in proportion, than heretofore. The Editor of the *Humboldt Register*, accounts for the circumstance from the fact that the young ladies accompanying the emigrant trains, are so weary and foot sore, when they arrive at Humboldt, that they readily assent to the intreaties of the Benedict miners in that out side settlement, to remain and become wives!

TREASURE EXPORT.—The excess of treasure shipments, this year over last, up to July 20th, was \$4,939,678.

AN EXPENSIVE BUILDING.—The new Metropolitan hotel, in this city will cost, furnished, \$300,000.

USEFUL AND CONVENIENT.—H. H. Bancroft & Co. have laid upon our table a new publication, very useful and convenient to miners and others in this State. The work has been compiled by H. B. Congdon, Esq., and is put up in a neat duodecimo form of 90 pages. The compilers preface which we append, is fully descriptive of the plan and object of the publication:

"The present volume contains all the laws and decisions which relate to Mining Corporations in the State of California; also the necessary forms used in the incorporation of Mining Companies. It is published because of the great necessity of such a work. Many thousands of men in California and Nevada Territory are directly engaged in mining and thousands more are owners of mining stocks; many millions of capital are invested in them and nearly the whole business of California and Nevada Territory is based on mining interests, yet comparatively few persons know any thing definite about the laws which govern these great interests. These laws are simple and easily understood.

The professional man will find the present volume of great convenience, as all the mining laws are compiled in their proper order, and the decisions of the Supreme Court bearing on the subject are arranged under appropriate heads. The most approved forms used in the formation of companies and a full and complete index are appended, and there will be no occasion for looking beyond the present volume for any law, decision, or form which relates to the subject.

To the great number of individuals who are members of incorporated Mining Companies and owners of mining stock as well as those who may become interested in like companies this little compilation presents an opportunity of acquiring perfect knowledge of the laws which govern the subject of their interests.

To persons who may desire to form Mining Companies it gives complete instruction and will enable them to commence and perfect their organization without legal advice or assistance."

CHINESE MECHANICAL SKILL.—The skill of the Chinese in many of the mechanical arts, is wonderful. We are assured by a gentleman of this city, who has had extensive opportunities to observe that singular people, in their shops and homes, in the familiar and confiding relation of a religious teacher, that the accounts we read of them in this particular, are not at all exaggerated. As an instance of their skill in one important branch of industry we have before us, this present writing, the account of a meeting of the Manchester (England) Philosophical Society, something over a year since, at which, Mr. Fairbairn, the President, exhibited two large pans of cast iron, made in China, which were used there for boiling rice. The metal, at the strongest pressure was only one-tenth of an inch in thickness, and possessed considerable malleability. The President remarked that the art of making such large castings, so thin and perfect, was unknown in England.

AN IMPROVED DRILLING MACHINE.—Mr. J. S. French, of this city, says the Bangor (Maine) *Whig*, who has been in California for some years, and is now on a visit home, has invented a machine by which the common hand drill worked by one man with three or four times the rapidity of execution obtained by the old sledge striking operation. We saw one of his machines, (manufactured by Messrs. Hinckley & Egery,) at work yesterday. By turning the balance-wheel of two feet in diameter, which is done with ease, the drill is struck by a twenty-five pound sledge, from sixty to ninety times a minute, and penetrates the hardest granite as fast as four men will do it by the ordinary process. The machine is intended for quartz-mining operations, where horizontal tunnels are to be carried into the bowels of the gold bearing hills, and it can easily be arranged so as to drill in all directions. It appears to be an important labor saving invention.

RICH QUARTZ LEDGE.—The Nevada *Journal*, of a late date says: A rich quartz ledge, situated near Omega, from which some picked rock, pounded in a mortar, has yielded at the rate of \$5,000 per ton. A mill to cost about \$7,000 has been contracted for, to be put up immediately. It is supposed about 1½ tons of the richest rock will pay for some of the most prominent men in this city are engaged in, and are owners of it. The company was incorporated July 11th as the Tecumseh Ledge Co. We have seen some specimens which appear exceedingly rich.

DANGEROUS CHARACTER OF BLACK PETROLEUM.—The *City Register*, in alluding to the recent fire, states that petroleum, in bulk, is very dangerous after being recently agitated. Any movement of a large quantity brings up the benzol, which is the lightest quality of it, to the top, and into the atmosphere. This is an inflammable gas. The slightest contact with a flame sets it off in a flash. Bulk oil imprudently contacts the atmosphere, and on the contact of a flame of any kind it ignites and explodes.



AN INTERESTING DISCOVERY.—An ancient copper pit, has recently been opened at the Portage Mines, Lake Superior, which, in some respects, is the most remarkable relic of an unknown race of miners, who worked the copper lodes of that region centuries ago. The Lake Superior *Mining Gazette* says :

Name of Company	Locality of Mine	Secretary.	Locality of Office
.....	Virginia District	Thos. J. Lamb, ..	Rm 1, Express Bldg.
.....	Virginia District	Wadsworth ...	Lucas A. Turner, Jr.
.....	Gold Hill, N. Ter	C. T. Hopkins, ..	165 Front street,
.....	Devil's Gate Dist.	A. de Senhall	Governor's House

ARMSTRONG, G. & S.	Virginia District.	W. H. Clark.	626 Montgomery st.
ARUNDEL, G. & S.	Slate Range District.	W. H. Clark.	524 Montgomery st.
ASHTONIAN LUMBER CO.	Esmeralda District.	G. B. Buckhahn.	207 Clay street.
ARNDSON, J. & S.	La Paz, New Mex.	W. B. Blokes.	224 Montgomery st.
ARNDSON, G. & S.	Slate District, Humb.	W. H. Martin.	617 Clay street.
ARNDSON, G. & S.	Slate Range.	W. H. Clarke.	224 Montgomery st.
ARNDSON, G. & S.	Slate Range.	W. H. Clarke.	224 Montgomery st.
ARNDSON, G. & S.	Alameda County.	L. H. Gibson.	224 Montgomery st.
ARNDSON, S. M. Co.	Esmeralda District.	J. A. Rawson.	Esmeralda Building.
ARNDSON, G. & S.	Salt Spring District.	J. A. Rawson.	Atherton Building.
ARNDSON, G. & S.	Devil's Gate Distr.	J. F. Pope.	113 California st.
ARNDSON, G. & S.	Esmeralda District.	S. Patten.	522 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	Wm Winchester.	Aurora, Mono Co.
ARNDSON, G. & S.	Devil's Gate Distr.	J. O. Strang.	816 Sansome st.
ARNDSON, G. & S.	Humboldt District.	J. H. Gager.	Monte St. Ann Bldg.
ARNDSON, G. & S.	Esmeralda District.	J. H. Gager.	522 Montgomery st.
ARNDSON, G. & S.	Slate Range District.	W. H. Clark.	522 Montgomery st.
ARNDSON, G. & S.	Virginia District.	R. L. Taylor.	612 Washington st.
ARNDSON, G. & S.	Esmeralda District.	L. L. Bibbins.	305 Montgomery st.
ARNDSON, G. & S.	Humboldt District.	A. L. Chisholm.	413 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	E. Labels.	422 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	Wm V. Garvey.	622 Merchant st.
ARNDSON, G. & S.	Esmeralda District.	J. A. Rawson.	Esmeralda Building.
ARNDSON, G. & S.	Slate District, Humb.	Robert White.	816 H. H. H. Plac.
ARNDSON, G. & S.	Slate Range District.	W. H. Martin.	617 Clay street.
ARNDSON, G. & S.	Slate Range District.	G. J. Barry.	606 Sacramento st.
ARNDSON, G. & S.	Slate Range.	G. J. Turner.	606 Montgomery st.
ARNDSON, G. & S.	Amo Co. dis. Humb.	J. S. Luty.	365 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	John W. Gould.	365 Montgomery st.
ARNDSON, G. & S.	Slate Range District.	L. Chisholm.	413 Montgomery st.
ARNDSON, G. & S.	Slate Range District.	W. H. Clark.	522 Montgomery st.
ARNDSON, G. & S.	Good Hill District.	P. B. Cornwell.	605 Merchant st.
ARNDSON, G. & S.	Esmeralda District.	R. N. Van Brunt.	700 Montgomery st.
ARNDSON, G. & S.	Virginia District.	E. C. Lovell.	434 Jackson street.
ARNDSON, G. & S.	Lower California.	S. S. Sprague.	Or Cal & Samsone.
ARNDSON, G. & S.	Virginia District.	J. P. Soure.	Lucas & Turner Bldg.
ARNDSON, G. & S.	Silver City.	W. B. Blokes.	413 Sansome st.
ARNDSON, G. & S.	Esmeralda District.	D. W. Wilder.	522 Montgomery st.
ARNDSON, G. & S.	Van Horn District.	F. L. Robbins.	505 Montgomery st.
ARNDSON, G. & S.	Lufkin County.	John W. Gould.	406 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	J. Woodhull.	326 Clay street.
ARNDSON, G. & S.	White & Eagleland.	W. H. Sheffield.	642 Clay street.
ARNDSON, G. & S.	Slate Range District.	W. W. Lawton.	400 Montgomery st.
ARNDSON, G. & S.	Good Hill District.	L. Barry.	606 Sacramento st.
ARNDSON, G. & S.	Esmeralda District.	J. A. Rawson.	Esmeralda Building.
ARNDSON, G. & S.	Humboldt District.	N. B. Mulville.	606 Montgomery st.
ARNDSON, G. & S.	Good Hill District.	W. B. Agard.	412 Front street.
ARNDSON, G. & S.	Virginia District.	Henry Toomey.	Or Mont & Cal.
ARNDSON, G. & S.	Esmeralda District.	Wm L. Duncan.	Pioneer Building.
ARNDSON, G. & S.	P. R. dis. Humbi.	M. G. Elmore.	528 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	E. W. Chambers.	11 Court Block.
ARNDSON, G. & S.	Virginia District.	W. E. Wool.	610 Merchant st.
ARNDSON, G. & S.	Slate Range.	G. J. Turner.	606 Montgomery st.
ARNDSON, G. & S.	Humboldt District.	V. B. Post.	Lucas & Turner Bldg.
ARNDSON, G. & S.	Mariposa County.	John W. Gould.	406 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	Flores Brownjohn.	621 Clay street.
ARNDSON, G. & S.	Van Horn District.	J. S. Luty.	365 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	L. H. Purkitt.	Custom House.
ARNDSON, G. & S.	Esmeralda District.	J. A. Rawson.	Esmeralda Building.
ARNDSON, G. & S.	Virginia District.	D. W. Young.	Or Mont & Jehn.
ARNDSON, G. & S.	Virginia District.	G. B. McAneny.	712 Montgomery st.
ARNDSON, G. & S.	Virginia District.	C. L. Farrington.	500 Sacramento st.
ARNDSON, G. & S.	Virginia District.	W. F. Dean.	53 Montgomery Block.
ARNDSON, G. & S.	Silver City.	W. E. Dean.	53 Montgomery Block.
ARNDSON, G. & S.	Good Hill District.	J. H. Jones.	321 Front street.
ARNDSON, G. & S.	Esmeralda District.	J. A. Rawson.	Esmeralda Building.
ARNDSON, G. & S.	Esmeralda District.	John Woodthorpe.	326 Clay street.
ARNDSON, G. & S.	Silver Mt. mon.	J. H. Gager.	Merch st. mut bldg.
ARNDSON, G. & S.	Slate Range Distr.	A. H. Clark.	522 Montgomery st.
ARNDSON, G. & S.	Telescope District.	David Wilder.	522 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	L. L. Bibbins.	305 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	L. L. Bibbins.	305 Montgomery st.
ARNDSON, G. & S.	Virginia District.	V. B. Post.	Lucas & Turner Bldg.
ARNDSON, G. & S.	Humboldt District.	J. F. Nesmith.	502 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	Joseph R. Read.	4 Armory Hall.
ARNDSON, G. & S.	Esmeralda District.	L. H. Purkitt.	Custom House.
ARNDSON, G. & S.	Esmeralda District.	John Woodthorpe.	326 Clay st.
ARNDSON, G. & S.	Esmeralda District.	A. D. Rawson.	Esmeralda Building.
ARNDSON, G. & S.	Rock Springs Dist.	M. G. Elmore.	528 Montgomery st.
ARNDSON, G. & S.	Esmeralda District.	M. G. Elmore.	528 Montgomery st.
ARNDSON, G. & S.	Del Norte District.	E. Barry.	636 Sacramento st.
ARNDSON, G. & S.	Esmeralda District.	C. H. Wakelee.	612 Merchant str.
ARNDSON, G. & S.	Virginia District.	Henry Toomey.	Or Mont & Cal. st.
ARNDSON			

HALE & NORCROSS	Virginia District	J. F. Lightner	Metropolitan blk.	
HALL	G & S	Humboldt Nev. Ter	L. Francione	Lucas & Turners
HALL WALKY	G & S	Esmeralda District	J. H. Gager	6 Parrots Building
HALL	G & S	Esmeralda District	J. H. Parkitt	Custom House
HALL G. & M. CO.		Russ District	David Winter	522 Montgomery st
HALLS	G & S	Esmeralda District	James Neary	326 Clay st.
JACK HAYES		Esmeralda District	J. H. Blood	7 Montgomery'y Bk
JEWELL	G & S	Devils Gate	Samuel Marx	810 Wash'gton St
JOSEPHINE	G & S	Coso District	W. W. Lawton	400 Montgomery'y st
JASON M CO		Sierra District	L. Maubee	300 Montgomery's st
JAY	G & S	Esmeralda District	J. H. Gager	405 Montgomery's st
KANAN RICHMAN CO		Humboldt Co.	C. Weitzer	520 Montgomery st
KAPOTEK	G & S	Esmeralda District	C. H. Wakele	162 Merchant Ar
KATE	G & S	Humboldt Nev Ter	L. Francione	Lucas & Turners
KOHLER BROS		San Antonio, L. C.	Kohler Bros	same name street
KOHLER	G & S	Esmeralda District	James Neary	326 Clay st.
LA BLANCA M CO		Sierra, Mexico	Chas. Frueberg	138 Clay street
LIVE VANKER G & S		Slate Range District	W. W. Lawton	400 Montgomery'y st
LIVELY & CO	G & S	Esmeralda District	W. W. Lawton	400 Montgomery'y st
LIVORNE M CO		Gold Hill District	J. S. Paxon	Lucas & Turners
LA ARBUTHNOT		Esmeralda District	V. B. Post	Lucas & Turners
LIGHTNING TEL. CO		Star District	Charles Judd	Sheiman's Buildg
LILLY DART		Esmeralda District	Joseph R. Beard	4 Armory Hall
LIS CRUZOTTAS M CO		Mexico	C. J. Brudman	Cor. Jack n' Fruit
LIVINGSTON	G & S	Esmeralda District	James Neary	326 Clay st
LOWE	G & S	Virginia District	R. N. Van Brunt	706 Montgomery st
LABRIE T & M		Silver City District	J. F. Pope	115 California st
LIVE ACUT CUTTER CO		Gopher, Cal. Co.	J. H. Gager	Merchist, mnt blk
MARTINSON	G & S	San Antonio, L. C.	Wm. Faulkner	411 Clay st
LA PALMA		Lower Mexico	John W. Gould	466 Montgomery st
LA BLANCA		Sierra, Mexico	Chas. Friedberg	308 Clay st
LADY BRYAN, G & S		Flowersy District	J. F. Bailey	608 Sacramento st
L. L. HILL Mfg Co		Yudumie County	John B. Russell	410 Montgomery'y st
LAURENCE	G & S	Esmeralda District	J. H. Gager	Merchist, mnt blk
MAXFELDER	G & S	Esmeralda District	Wm. L. Dunan	Pioneer Building
MAXWACKIE	G & S	Slate Range	W. H. Clarke	224 Montgomery st
MORROW, EAST G & S		Slate Range	W. H. Clarke	224 Montgomery st
MOUNTAIN VIEW	G & S	Slate Range	W. H. Clarke	224 Montgomery st
MURKIN & STANS		Calaveras County	L. Francione	Lucas & Turners
MANZAN LLA Mfg Co		Sierra, Mexico	H. B. Brownjohn	621 Clay Street
MORSE	G & S	Virginia District	R. T. C. Page	428 Montgomery st
MURPHY	G & S	Esmeralda District	J. H. Gager	Merchist, mnt blk
NEV. DANFORTH	G & S	Virginia District	F. A. Fabens	47 Montgomery'y Bk
MEREDITH	G & S	Virginia District	E. B. Holmes	712 Montgomery'y st
MADISON		Sierra, Mexico	F. H. Waterman	618 Merchant str
MADISON, ST. RANGE		Slate Range	G. J. Turner	606 Montgomery'y st
MOHAYE, G. S. & C		La Paz, Colorado	G. J. Turner	606 Montgomery'y st
MIDDEL	G & S	Esmeralda District	John Crowley	428 Montgomery'y st
MORTON	G & S	Slate Range District	John Crowley	428 Montgomery'y st
METROPOLITAN CO		Copperopolis	P. B. Cornwall	608 Merchant st
MADISON	G & S	Virginia District	P. B. Cornwall	608 Merchant st
MAMMOTH, No. 1		Esmeralda District	Joseph R. Beard	4 Armory Hall
MOUNT HOPKINS		Virgin & Gold Hill	Doris Brownjohn	621 Clay street
MANHATTAN	G & S	Humboldt dis. n.l.	H. Gager	Merchist, mnt blk
MINNA PUERTA		Sierra, Mexico	J. P. Nourse	Lucas & Turners
MAMMOTH CO G & S		Excelsior District	M. G. Elmore	525 Montgomery st
MILNER, CO. G & S		Humboldt, Cal.	J. H. Gager	Merchist, mnt blk
NORTH STAR	G & S	Humboldt	J. H. Gager	Merchist, mnt blk
NAPOLION CO. Co.		Calaveras county	R. C. Alden	426 Montgomery'y st
NEW ERA	M CO	Mripasa District	E. Drury	636 Sacramento
NEBLE C M CO		Calaveras county	E. A. Breed	Cor. Bat. & Wash
NORTH POTOMI		Virginia District	E. V. Jones	40 Montgomery'y Plk
NORMAN		Virginia District	J. H. Brewer	40 Montgomery'y Plk
NEVADA CO. M CO		Grass Val. Nev. Co.	Dino Armstrong	610 Merchant strt.
NEVADA CO. M CO		Esmeralda District	P. B. Cornwall	608 Merchant st
NEVADA Mining Co		Virginia District	R. N. Van Brunt	706 Montgomery'y st
NORTON	G & S	Slate Range District	A. H. Clark	522 Montgomery'y st
NEW YORK	G & S	Soledad District	E. Barry	636 Sacramento st
OCCIDENTAL U M CO		Esmeralda District	E. Daniels	402 Montgomery'y st
OSERIDA	G & S	Esmeralda District	C. Stevens	6 Parrots Building
CLEAR CREEK G & S		Emma Francis dis.	J. H. Gager	Merchist, mnt blk
OCCIDENTAL G & S		Esmeralda District	J. H. Gager	Merchist, mnt blk
PENSA	G & S	San Antonio Dist.	J. N. Thorne	411 Clay st
POTOMI	G & S	Virginia District	J. F. Lightner	Metropolitan blk
PRIME OF ESMERALDA		Esmeralda District	J. F. Bailey	608 Sacramento st
PORRER	G & S	Lamb Ledge	R. C. Page	420 Montgomery'y st
PROXER COSO G & S		Coso District	E. B. Holmes	712 Montgomery'y st
POTYONA	G & S	Virginia Dist	C. Stevens	6 Parrots Building
PACIFIC	G & S	Esmeralda District	H. R. Reed	321 Washington st
PACIFIC	G & S	Esmeralda District	John Crowley	428 Montgomery'y st
PRIDE OF THE W. WOOD		Esmeralda District	A. L. Chamberlino	418 Montgomery'y st
PERKLESS	G & S	Esmeralda District		

The ancient miners have worked down on the hanging wall side about ten feet below the surface of the rock, where further progress was prevented by an almost continuous floor of copper. The copper in this floor is exceedingly pure and massive; and most singular of all, many of the lately exposed faces bear evidence of having been cut with some small sharp instrument.—These marks are distinctly visible in several places, the marks and impressions being as clear and sharp as if made within the past year. This, we believe, is the first instance where it was apparent that any of the ancient miners had tools of sufficient hardness to take out copper, even after being considerably softened by the action of fire. It is quite evident that, as in almost every old pit which has been opened in the country, fire has been the agent used to soften the metal before it was cut off, as the rocks bear evidence of calcination. Several stone hammers have also been taken out of the waste rock and earth, which has been piled in the pit, and pieces of birch bark and burnt wood have been found mixed. As yet the pit is only partly cleaned out, and we may expect to see other curiosities and peculiarities when the debris is all removed. Another interesting feature is the fact that the bottom of the trench is nearly one continuous bed of copper.

MINERAL DISCOVERY IN MARIN COUNTY.—We have before us a sample of ore, obtained from Marin County, which, according to an analysis by Mr. J. H. Churchill, of this city, contains :

Sesquioxide of Chromium.....	42.0
Oxides of Iron.....	40.5
Alumina.....	15.0
Silica.....	2.5
	<hr/> 100.0

This ore will probably be very valuable when San Francisco chemical manufactures are further developed.

Candles, wax and green backs, dyeing and bleaching will each lay it under contribution.

THE TEMESCAL TIN MINES, situated in the mountain range 60 miles east of Los Angeles, are probably the richest mines of that metal, in the world, and would probably have been in active working condition long ago, had it not have been for a dispute between contesting claimants with regard to title. The case is now pending in the Southern District Court of the United States, for California. It has already been argued, and the decision of the Court will soon be rendered. We may look with much confidence, for early and important developments from the "California Tin Mines" after the decision, above referred to, has been duly rendered.



## THE MINERS' LABORATORY.—NO. XI.

## SILVER.

Silver is the whitest of all metals, and is capable of receiving a lustre inferior only to polished steel. It is exceedingly malleable, and in ductility is next to gold. It is harder than either tin or gold, but less so than copper. When pure it may be easily cut with a knife, and in that state melts at a full red heat. When fused in an open vessel, it absorbs oxygen in large quantities, sometimes amounting to over twenty times the volume of the metal itself. On cooling to the degree of solidity, the oxygen is entirely expelled.

When silver is heated to redness, in contact with porcelain or glass, the absorbed oxygen combines with the metal to form an oxyd, which, uniting with the silicic acid of the substance with which it is in contact, gives rise to the formation of a yellow enamel. When heated very strongly in a blast furnace, it gives off sensible metallic vapors. By fusing a large quantity of silver, and afterwards allowing it to cool very gradually, cubic and octahedral crystals may, on piercing the solidified crust and running off the still liquid metal, be obtained. Silver does not absorb oxygen at ordinary temperatures, but speedily becomes blackened on exposure to an atmosphere containing the most minute traces of sulphureted hydrogen gas, which is decomposed by it with the greatest facility.

Heated to redness, in contact with the caustic alkalis, it does not become in the least affected, and is for this reason frequently employed for making crucibles to be used when attacking various substances by caustic potash. In the presence, however, of fused alkaline silicates, silver vessels become acted on, and the silicate is stained of a yellow color. Oxyd of silver is reduced by heat alone, and a globule of metal is thus obtained.

Unless in a state of extreme division, silver is not attacked by hydrochloric acid, and even then requires to be heated to the temperature of ebullition, before the decomposition of the acid is affected. By dilute sulphuric acid no effect is produced, but when strong sulphuric acid is employed, it is, when aided by heat, readily decomposed, with the formation of sulphate of silver and the evolution of sulphurous acid gas. Nitric acid readily attacks silver even at ordinary temperatures; binoyd of nitrogen is evolved, and nitrate of silver is produced. By chlorine, iodine and bromine, silver is, even in the cold, readily attacked.

Silver is found not only in a pure or *native* state, but in a great variety of combinations with other metals and substances, forming no less than twenty-three distinct species, already recognized and described by mineralogists and chemists. We shall attempt to describe these various minerals, and their action under the simplest tests, that those not versed in the science of mineralogy can hardly fail to distinguish one species from another, and to ascertain to what species any silver mineral they may find should properly be referred. It is important to observe, however, that the simple silver minerals, as with those of other metals, generally occur in the veins in mixtures among themselves and other mineral species, so that it is not always possible to so separate them that each may be recognized by its peculiar characteristics. It is only here and there, generally, that specimens with the characters well-marked and distinct, can be found.

In the upper portions of mineral veins, where the air and moisture has had access for ages, a certain amount of decomposition has taken place among the minerals, and new combinations have been formed, which may be termed *secondary ores*. These are general more earthy, and highly colored than those in the deeper parts of the vein, being more intermingled with salts of copper and lead, and peroxyd of iron. Such ores, in Mexico, are generally known as *colorados*, especially if red, and in Peru as *pacos*. The ores from a greater depth in the mine which have not been affected by the access of air are more brilliant and black and are called *negros*.

If the gangue or vein-stone is of quartz, as, for example, in the Comstock vein, Washoe, this remains a porous mass, or "ledge," and is more or less free from valuable minerals at the surface, being a mere skeleton of the vein, and valuable chiefly as an indication of riches below. With ores of the precious metals, the cavities of outcrops of this character generally contain more or less of the metals in fine grains or dust, which may be collected by panning, as is well known in the case of gold quartz.

Many of the simple minerals of silver are very seldom met with, and are not of economical importance. Accordingly, a division has been made, and the most important ores will be first described. Of this class, the most common mineralizing elements are sulphur and antimony. Chlorine and bromine also form important compounds, which formerly were only known as mineralogical curiosities, but have since been found to be abundant in some of the Mexican and South American mines. It is possible therefore that some of the compounds now so rare, may hereafter be found among the most important and productive ores.

## THE MINES OF LOWER CALIFORNIA—SAN ANTONIO DISTRICT.

The above mines are located near the Eastern Coast of the Peninsula of Lower California, and about one hundred miles north of Cape St. Lucas, and are not over twenty distant from good anchorage, in Ventura Bay, to which a good road has been constructed, and is now in use. The mines of this district were the first ever worked in the Territory of Lower California. The existence of the precious metals in these mountains, had been known to the early Mexicans long previous to the middle of the last century, but it was only at about that time that any attention was paid to working them. The missionaries had previously discouraged any attempts of the kind, as likely to introduce trouble and disorder into the country.

About the year 1750, Don Manuel Ozio, a man who had acquired much wealth in the Pearl Fisheries on the coast, commenced extensive mining operations in this district, by which he added largely to his fortune. About this time, a Castilian, named Marone, also discovered and opened the mine now known at the "La Marronena," being named from its discoverer. The two gentlemen above named, were considered the wealthiest men in that part of Mexico. The first named paid \$36,000 in one year as the Government's one-fifth share of the returns of his pearl fisheries. This money was paid in "ores" extracted from his mines.

It is said that Marone joined the Mexican Government, during a space of two years \$1,000,000, all of which was taken, during that time, from his "La Marronena" mine. There are now some twenty mines, being opened by San Francisco capital, in a portion of this district comprised within a circuit of less than fifteen miles, aside from them fully three times that number are held by Mexicans. This district is fully equal in value of its mineral wealth, to any similar district in the world, not excepting even that traversed by the famous Comstock vein in Washoe. The range of mountains intersecting this district runs nearly North and South, their northern direction being a little to the East. This mountain range is traversed by three distinct leading veins of highly metalliferous ore, running nearly parallel, and some two miles apart. Upon these several veins, are located the claims alluded to, each full claim comprising 2,600 feet, and subdivided, by Mexican custom, into twenty-four shares or parts.

The middle vein appears upon the surface as three distinct leads, which, in all probability, unite at no very considerable depth. The most important locations upon this vein, commencing on the North, are the San Nicolas, San Pedro, La Fortuna, La Codicia, Pena, La Solidad, La Marronena, La Mina, Me. docina and Molina. The two first mentioned, the sixth, and the last belong to a company of wealthy Mexicans, residing chiefly in the City of Mexico. This is probably the most wealthy and extensive mining company in the world. In addition to the four mines already named, belonging to this company, they also own eighteen other mines in other localities, but all located on the Peninsula of Lower California. This latter fact, is rather significant of the high estimation in which this portion of Mexico is held, as a mining region by the capitalists of that country. The six mines, above enumerated, as not belonging to the Mexican Company, are under the control of San Francisco capital, and are all being vigorously worked.

We have before us the first report of the Superintendent, R. C. Jacobs, Esq., of the Pena and Marrionena mines, from which we learn that most gratifying progress is being made upon both of those mines. About 100 cargoes of very rich ore have been taken out of the latter, besides thoroughly cleaning out the old workings, putting down a new shaft, erecting houses, etc., and making all necessary preparations for active winter operations. The Superintendent, who is

now in this city, brought up with him thirty sacks of ore, which is to be worked here, as a trial lot. This ore may be seen at the office of the Secretary, Wm. Faulkner, Esq., No. 411, Clay Street. No ore has yet been received from the Pena. The preparatory labor, however, for getting out ore is nearly complete.

The first of the *re-locations* in this district were made, about four years since, by the large Mexican Company, already alluded to. The greater number, however, were made last Summer and Fall. The early workers of these mines, abandoned them during a revolutionary period that occurred many years ago, the precise date of which, we have not now at hand.

We shall resume this subject in our next issue, giving some account of the ancient manner of working these mines, peculiar characteristics of the veins, country, etc.

## THE COPPER EXCITEMENT.

Evidence, corroborative of our recent remarks in reference to the existence of undue excitement with regard to copper, is already beginning to reach us. We copy the following significant paragraph from the Grass Valley *National* of the 23d. instant:—

The fever for prospecting has abated, and instead of the extravagancies in which our people indulged a short time since, as to accumulating fortunes in a few weeks time, copper and other interests are properly viewed, and men no longer become enthusiastic over the discovery of auriferous or verdigris, nor do they take such indications as indubitable evidences that a Union or a Napoleon copper mine is near the surface, to render them fabulous rewards for a few days' labor. All the prospecting excitements of this country have had their reactions, generally disastrous in their character, but that of the present is full of healthful signs. As we predicted last Spring, a majority of the reported copper discoveries hereabout have proved themselves worthless, but this prospecting developed numerous rich copper fields, and from many of the claims but recently opened fine qualities of copperiferous ores are now being shipped. The amount of prospecting here is at present less than it has been for the past six months; while more substantial work, with better labor-rewards, is being performed than at any time during our residence in Nevada county.

**COSO MINES.**—News of late date from the Josefine Mine report another rich strike, with strong evidence that it will continue so.

The Mayflower, at a depth of thirty-five feet, is taking out rich rock, and have three tons at the Lotta Mills, awaiting its turn to be crushed. An assay, said to have been made on average rock, taken from this claim, by Messrs. Kellogg, Houston & Co., gives \$1,557 in gold and \$26 in silver. This lead is situated one mile from the Lotta Mills, and contains 1,200 feet.

**RICHER THAN EVER.**—The *National*, published at Grass Valley, says that the Allison Rauch Company has recently struck rock much richer than any hitherto found in that famously rich lode. The discovery was made at the bottom of their 400-foot incline. The *National* says it will be crushed in a few days, and predicts that it will astonish even those familiar with that immensely rich mine.

**LARGE YIELD.**—According to the Territorial *Enterprise*, the Ophir Company took out, within a fraction, \$200,000 during the month of June. This would be equivalent to about \$142 per foot. The above yield would indicate an early advance in the per centage of dividends of this company.

DIVERS have already succeeded in securing \$50,000 worth of goods, and raised one box containing \$31000 in specie from the wreck of the Anglo-Saxon, off the coast of Nova Scotia. They also brought up one hundred and sixty dead bodies, and caused them to be buried on shore.

**THE BUSINESS OF A SCHOLAR.**—To talk in private, to think in solitude, to inquire or answer inquiries, is business of a scholar. He wanders about the world without pomp or terror; and is neither known nor valued but by men like himself.

**LARGE LUMP.**—A nugget weighing 15¾ pounds has been picked up near Columbia, in Tuolumne county.



## THE MINING SHARE MARKET.

The activity in the Mining Share Market, for the past week, has been quite equal to any similar preceeding period. The transactions embrace a large number of stocks, though chiefly confined to those that are paying dividends or rapidly approaching that point.

Gould & Curry shares have not been dealt in. Holders are demanding \$5,600 with buyers at \$5,500. A dividend of \$1.00 per foot was declared on Saturday.

Ophir has been largely dealt in at fluctuating rates. These shares opened at \$2100, advanced to \$2,300, but declined to \$2,000 in consequence of sale of July dividend at \$30 and \$20 per foot.

Savage remains at about the last quotations. Efforts are being made to secure mill facilities for working the ore. Until that end is accomplished, and dividends placed in early prospect, but little will be done in this stock.

Chollar still continues to advance, and is quite in favor, but with limited transactions.

Daney shares have been quite active, but at declining rates. The market opened at \$310, stimulated by recent advices of favorable indications in the company's main tunnel. Shares subsequently declined to \$240, upon rumours of a low dividend for the coming month. Dividends on 500 shares for August have been sold for \$7 dollars per foot—last dividend \$14. 820 shares of this stock has changed hands during the week.

Potosi is enquired for at \$740—lowest offer, \$740.

North Potosi has been quite active at slightly declining rates.

Burnside has been largely dealt in at \$11 @ \$13. 432 shares have changed hands.

Buckeye which was a favorite speculative stock, last week, and largely dealt in, has been more quiet the past six days, and is quoted at a slight decline—the sales having been 222 shares at \$45 @ \$53.

Blue Ledge, El Dorado County, is being considerably enquired for. Sales of 350 shares are reported at \$10½ @ \$11.

Sierra Nevada has a market at \$65; Burning Moscow at \$120. Charles Canyon is quoted at \$70 @ \$80; Lady Bryan is enquired for at \$13; Mount Davidson at \$3; Sacramento at \$50. Melones \$115 @ \$125; Fellowes \$65.

El Dorado shares have been in request at \$70 @ \$86; Madison is in demand at \$25; Governor Nye at \$10. Pride of the West may be quoted at \$100; Overman opened at \$390, declined to \$365; Crown Point shares have reached \$1225; Imperial is quoted at \$150; Bullion at \$80.

ESMERALDA.—Wide West has buyers at 145; Silver Hill, \$35; Utah, \$65; Josephine, \$11; Coso, 20; Pond, \$27½; Willow Springs, \$3.

HUMBOLDT AND REESE RIVER.—Sheba, 26 feet sold for \$300; De Soto is enquired for at \$75; Poney \$10; Buckeye is offered at \$20; St. Charles is enquired for at \$4; Constitution, 15 feet changed hands at \$15 per foot; Exchange, sales of feet reported at \$50 @ \$56; Humboldt Tunnel, 120 shares sold at \$1½ @ \$2; American Basin, \$15 asked; Pine Nut, \$10 asked.

## COPPER.

There is an evident lull, at the present time, in the Copper excitement, throughout the State. This quietude, however, is indicative of an approaching healthful condition of that branch of industry. It is a rest from an undue and frenzied attack of Copper-mania, which will undoubtedly result in much good by awakening prospectors to the necessity of a proper development of their mines, rather than rushing to capitalists with a few surface indications, to sell "feet" at big prices. Our people are beginning to learn that every surface indication, does not lead to a well founded and paying vein of copper. Such indications, however, are true starting points, which, as a general thing, may soon be developed into paying veins, or prove worthless to follow.

The results of legitimate explorations have already satisfied capitalists that the State is rich in copper, and no doubt need now exist, but that California will soon take rank as the first copper producing country on the globe. It is not necessary, to this end, that every copper mine should become a Union or a Napoleon; neither should our miners set down and take it for granted that there are no more such mines of

copper to be found. Let them continue their explorations in an energetic and legitimate manner. The chances of success in copper, in this State, are undoubtedly greater than those in any other metal.

The Union is making daily shipments of ore. \$2,000 per foot is asked for the only stock in the market.

Newton is progressing slowly, with no stock in the market.

Copper Hill is improving, and is now held at \$10 per share. Taking out about two tons of ore per day.

The Napoleon is progressing finely. A third level is now being run at a depth of 165 feet. The vein at that depth is 14 feet. Upwards of 100 tons of ore have been shipped to this city within three weeks.

The Keystone is also shipping ore and being efficiently worked.

Reports from Carmen Island, are that a large and true vein of ore has been struck.

There are six Copper mining districts in Butte county. The Forest lode, in the Kentucky Ranch District, it is said, yields ore containing 60 per cent. of metal. The lode is three feet wide.

In Calaveras county, work is rapidly progressing on the Empire, Calaveras, Lancha Plana, Josephine, Camp & McNulty, Collier & Hughes.

## TRANSACTIONS IN SHARES, FOR THE WEEK.

2 shs	Fellowes	65	2 do	Hale & Norcross	2100
82 do	Burnside	11	3 do	Hale & Norcross	2405
10 do	Burnside	12	40 do	Daney	306
5 do	Burnside	11 50	10 do	Bheba	300
40 do	Pride of the West	110	10 do	Pride of the West	108
45 do	Buckeye	47	11½ do	Pride of the West	110
25 do	Buckeye	45	30 do	Governor Nye	10
45 do	Buckeye	46	15 do	North Ophir	40
15 do	Buckeye	50	25 do	North Ophir	30
15 do	Buckeye	58	4 do	Madison	21
10 do	Buckeye	59	40 do	Blue Ledge, Cal.	21
50 do	Bodie Bluff	4 25	10 do	Pond	22
5 do	Madison	22	5 do	El Dorado	73
25 do	Madison	20	5 do	El Dorado	72 50
15 do	Blue Ledge, Cal.	15	5 do	El Dorado	73
10 do	Blue Ledge, Cal.	20	2 do	Melones	115
5 do	Wide West	152 50	5 do	Sacramento	80
4 do	Wide West	150	20 do	Chollar	995
15 do	Melones	115	10 do	Burning Moscow	130
30 do	Melones	125	20 do	Daney	300
4 do	Charles Canyon	90	40 do	Daney	310
5 do	North Potosi	52 50	1 do	Sheba	300
5 do	El Dorado	72 50			
20 do	El Dorado	73	10 do	Shoba	300
30 do	Burnside	11 50	4 do	Copperas Mills	350
6 do	Burnside	11	4 do	Bullion, Gold Hill	90
5 do	North Ophir	30	2½ do	Kohler Brothers	65
10 do	La Providence	8	65 do	Burnside	12 75
10 do	Blue Ledge	18	10 do	Baltimore America	60
11 do	Blue Ledge	150	1 do	Wide West	140
10 do	Napoleon	65	2 do	Wide West	147
2 do	Napoleon	67 50	5 do	Wide West	149
25 do	Bodie Bluff	50	10 do	Blue Ledge, Cal.	18
4 do	Pride of the West	107 50	5 do	Buckeye	45
11 do	Lucerne	25	10 do	Buckeye	48
4 do	Chollar	1000	10 do	Pride of the West	105
20 do	Burning Moscow	120	10 do	Melones	118
10 do	Burning Moscow	120	20 do	Daney	220
60 do	Ophir	2100	12 do	Ophir	2200
4 do	Hale & Norcross	210	24 do	Ophir	2225
5 do	El Dorado	72 50	12 do	Ophir	2310
10 do	Pride of the West	107	40 do	Daney	300
5 do	Pride of the West	105	12 do	Daney	290
5 do	Mount Davidson	4	4 do	Chollar	1000
5 do	North Ophir	25	10 do	Willow Springs	12
1 do	North Ophir	30	30 do	North Ophir	35
15 do	North Ophir	32	5 do	North Ophir	38
5 do	Lucerne	25	5 do	Utah	55
10 do	Charles Canyon	81	5 do	Utah	50
10 do	Buckeye	50	5 do	Utah	56
11 do	Buckeye	43	10 do	El Dorado	70
15 do	Buckeye	50	15 do	El Dorado	71
5 do	Buckeye	52 50	100 do	Bodie Bluff	4 25
30 do	Union, Russ District	1 90	10 do	Pride of the West	102 50
25 do	Utah	50	30 do	North Potosi	530
25 do	Esmeralda	22 50	50 do	North Potosi	53
15 do	Sierra Nevada	60 50	10 do	Buckeye	50
3 do	Wide West	150	10 do	Governor Nye	10
5 do	Wide West	152 50	10 do	Chollar	70
10 do	Bullion, G. H.	81	10 do	Chollar	70
5 do	Bullion, G. H.	82	20 do	Daney	290
24 do	Ophir	2300	2 do	Hale & Norcross	2075
12 do	Ophir	2310	20 do	Burng Moscow	140
37 do	Falls of Clyde	5	5 do	Overman	390
78 do	Union, Russ District	2	5 do	Overman	375
10 do	St. John	75	5 do	Bullion, Gold Hill	80
5 do	Silver Hill	32 50	10 do	La Providence	11
20 do	Michigan, Gold Hill	50	3 do	Overman	390
18 do	Michigan	50 50	5 do	Chollar	70
10 do	Hale & Norcross	2100	5 do	Dios Padre	75
5 do	Blue Ledge, Cal.	13	40 do	Blue Ledge	18
5 do	Pride of the West	103	40 do	Blue Ledge	14
10 do	Pride of the West	105	10 do	San Francisco, G. H.	62 50
12 do	Sierra Nevada	55	2 do	La Providence	11
5 do	Utah	65	5 do	Pennsylvania, copper	20
8 do	Wide West	152 50	10 do	Gray Ledge	6
10 do	Napoleon, copper	58	22 do	Mountain View	10
10 do	Napoleon	50	30 do	Prince Imperial	6
10 do	Daney	285	20 do	McClellan, copper	5
12 do	Ophir	2375	5 do	North American	50
12 do	Ophir	2375	8 do	Madison	25
20 do	Daney	265	25 do	Madison	25
48 do	Ophir	2160	20 do	Rhodes Digings	14
12 do	Ophir	2075	5 do	Lucerne	25
12 do	Ophir	2050	10 do	Red, White & Blue	10
20 do	Daney	270	10 do	Sierra Nevada	50
20 do	Daney	270	70 do	Reese Riv. r.	61 75

## REPORT OF BIDS

At the San Francisco Mining Stock Board,  
For the week ending July 26, 1883.

Names of Companies.	Total No. Shrs	Shares per ft	Per Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2050	2110	2300	2175	2010	1900
Gould & Curry	4,800	4	600	—	—	5500	5500	5500	5500
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	5,000	4	500	980	1000	1000	1000	1025	1000
Potosi	2,800	2	500	850	700	700	710	725	700
Hale & Norcross	8,900	2	900	1975	2010	2020	2050	2075	2125
Sierra Nevada	3,000	1	600	68	58	59	64	69	63½
Daney	8,000	4	500	300	275	292½	285	255	243
Burning Moscow	4,800	2	100	115	118	122½	128	145	135
North Potosi	2,000	1	300	45	47½	46	40	47	45½
Rogers, F. D.	5,000	1	250	—	—	—	—	—	—
Meredith	7,000	1	125	—	—	—	—	—	—
Charles Canyon	1,800	1	30	90	80	79	70	70	52½
Sacramento	1,500	1	600	70	81	80	81	81	81
Lucerne	1,800	1	600	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	—	—	350	—	3850	3300
Iowa	—	—	—	—	—	95	95	95	100
El Dorado	—	—	—	72½	72	70	66	65	—
Norton	1,600	1	—	—	6	6	—	6	5
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	11	11	11	12½	12½	11½
Adriatic	—	—	—	—	—	—	8½	—	—
Brennus	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel	10,000	1	100	2½	2½	2½	2½	2½	2½
Mount Davidson	10,000	1	200	—	—	—	—	—	—
Pride of the West	—	—	—	100	102½	105	102½	98	—
G. H. Quarz M. Co.	—	—	—	—	—	—	—	—	—
Imperial	—	—	—	440	—	440	450	450	450
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	1	600	150	146	151	152½	141	140
Antelope	1,200	1	600	—	—	—	—	—	—
Esmeralda	1,800	20	20	22½	20	22	20	18	18
Red Bl. Monte	4,400	1	400	150	150	—	150	—	160
Elva	1,200	1	100	—	—	—	—	—	—
Utah	1,600	—	250	45	50	60	60	60	62½
Silver Hill	3,000	1	500	37	37½	31	30	28	—
Nevada	1,200	—	250	20	20	20	—	—	—
Federal Hope	—	—	—	300	—	—	—	—	—
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	—	—	—	—
Falls of Clyde	—	—	—	6	5	5	6	—	4
Sunbeam, S. W. ex.	—	—	—	—	—	—	—	—	—
Bamboo	600	1	500	—	—	—	—	—	—
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	10	10½	—	10	—	—
Coso	5,600	—	600	—	—	—	—	—	—
Willow Springs	2,700	1	100	—	—	—	8	—	3
Empire	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	—	1000	—	—	—	—	—	—
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	70	60	—	50	—	60
Josephine	—	—	—	—	—	—	—	—	—
<b>CALIFORNIA STOCKS.</b>									
Laurie Hill	—	—	—	1½	1½	—	—	—	—
Utica	—	—	—	—	—	—	—	—	—
Rhodes Digings	—	—	—	—	—	6	12	15	14

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, July 23, 1883.

Bid.	Ask'd	Bid.	Ask'd
<b>Virginia Mining District.</b>			
Ashland	\$ 9	Sierra Nevada	\$ 50
Allen	30	Sacramento	50



## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of May, 1863.

July 3d, - - - - - Steamer Golden Age  
July 13th, - - - - - Steamer St. Louis  
July 23d, - - - - - Steamer Constitution

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidesdorff sts.

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and tested the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

sol6-1f

ZENAS WHEELER.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

\*Staple and Fancy Dry Goods,  
CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,  
SAN FRANCISCO.

D. MORRIS,  
MACHINE SHOP,  
227 Market, corner of Beale Street.

Manufacturer of

WARRANTED FIRE-PROOF SAFES  
Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. je13

## REMOVAL.

OFFICE OF THE PACIFIC METAL  
Original Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold-ore per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
\* COPPER ORES—highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

## SOUTH PARK

Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO,  
Office in Shiel's Block, opposite Masonic Temple.  
je13 S. F. CLOUSER, Secretary.

WILLIAM BRODIE & CO.,  
CALIFORNIA FOUNDRY,  
Fremont Street, near Market, San Francisco.

## Light and Heavy Castings,

Of Every Description, Made to Order. Particular attention paid to all kinds of House Work, Plain and Ornamental. jyl3

THE  
BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

## ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

## METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

## EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three last years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

## EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

## BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent. more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1850, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Rod being cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico.  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill.  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico.  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico.  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino.

## MANUFACTURED ONLY BY

GODDARD & CO.,

At the Pacific Iron Works.

SAN FRANCISCO.

os 125 to 136 First street, and 126 to 144

Fremont street.

P. DONAHUE, H. J. BOOTH, C. S. HIGGINS.

## UNION

IRON AND BRASS FOUNDRY.

(The First Established in the State.)

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

HAVING ADDED TO THE SEVERAL Departments all the recently improved Tools, this Establishment is now the most Extensive and Complete of any on the Pacific Coast.

The undersigned are prepared to furnish, at short notice, Locomotive, Marine and Stationary Engines, of every size and description.

## BOILERS.

Locomotive, Flue, Tubular, Upright and Cylinder, furnished with or without engines, complete. Machinery and Castings of every description, Saw-mills, Grist Mills, Car Wheels, Derrick Irons, etc.

QUARTZ CRUSHING BATTERIES,  
Embracing a great variety of Stamp, Mortar and Cam Patterns.

AMALGAMATING MACHINERY,  
Varney's Improved Patent Pans and Settlers, Wakely Pans, Amalgamating Tubs, Plaised's Grinders, Chile Mills, Concentrators, etc., etc.

## MINING PUMPS.

Cornish, Lift and Force Pumps, from four to eight feet stroke, with Pipes, Bob Mountings, and Gearing complete.

## HOISTING DRUMS.

For Shafts or Inclines, with clutch, friction or V cones. Sole Agents and Manufacturers for the Pacific Coast, of C. and G. M. Woodward's Celebrated Patent Safety Steam Pumps and Fire Engines.

All Contracts and Orders executed with promptness and dispatch, and at reduced prices for Cash.

je21

DONAHUE, BOOTH, & CO.

## Giffards Injectors,

FOR SUPPLYING BOILERS WITH FEED WATER  
Sole Agents and Manufacturers for the Pacific Coast, of Giffard's Injectors, which are the most valuable instruments should be without one of these valuable instruments. Send for a Circular.

je22

DAVID STOPPARD, Agent,  
Cor. Pine and Front Sts., San Francisco.

## I. C. E. KLEPZIG &amp; CO.,

## GUN MAKERS,

...AND...

## DEALERS IN GUN MATERIALS,

733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and a'so Silver Plating, by E. Ekland. je21

## CORNELL'S

## EXCELSIOR GALLERY,

650 Washington st. Third doors below  
Kearney.

Having refitted the above rooms the undersigned is now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

## CARD PICTURES.

As I have every facility for producing these beautiful pictures, in all their different varieties, I have reduced the price to

\$3 PER DOZEN AND \$2 PER HALF DOZEN!

Large size Photographs. \$3—Extra copies \$1 each.

AMBIOTYPES in all Styles and Prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist.

je22

R. H. CORNELL.

## BAUNCHEIDTISM,

THE PRESERVER AND PRODUCER OF LIFE.

THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF curing disease, is a "fait accompli" in medicine, and needs no more proof. The public has crowned Bauncheidtism already with an extraordinary patronage, and it is acknowledged by all men of science that Bauncheidtism is founded on a rational, scientific basis.

It can safely, and with sure success be applied to paralysis in consequence of apoplexy, Podagra and Rheumatism of every description, which kind of complaints can find their only relief by the above method.

Especially can it be applied successfully, in the spring of the year to diseases of the eye.  
Dr. Borchers is the only doctor in California who has the original series of Dr. BAUNCHEIDT and his original oil. Dr. Borchers is also in possession of original letters of the inventor of the method by which he can prove that he is perfect master of the latter.

DR. J. C. BORCHERS.

No. 19 Kearney street, and No. 4, Mark's Place, First story, No. 5. Office hours from 9 to 11 A. M., and 1 to 4, and 7 to 9 P. M. je21

## REYNOLDS'

Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

127 of these Invaluable Machines,

## ARE NOW IN USE

In California and Nevada Territory, giving a perfectly regular motion, and Saving 20 to 65 per cent of the Fuel.

## Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

## Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

## Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

## Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.

## Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

## Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years. Refer to—Sugar Refinery, San Francisco, Cottell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States.

E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

## MINING &amp; SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to Mining purposes, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietors having had great experience as Patent Agents, together with facilities at Washington that enable them to take Patent with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefited by its personal, as its columns will from time to time contain original engravings of new machines and inventions, together with large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects and Millwrights.

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers—Four Dollars per annum

## Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscription is only \$2.50. Names can be sent in at different times and from different Post offices. Specimen copies will be sent gratis to any part of the country.

## EWE &amp; SMITH, Publishers,

Room 27, (formerly U. S. Court Building, Corner Washington and Battery streets, San Francisco.



## DESKS

AND  
Office Furniture,  
OF ALL KINDS.....FOR SALE BY  
**JOHN WIGMORE,**  
No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all kinds, attended to.

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19, First Street, San Francisco,  
Furnish Castings and Machinery of all kinds

ALSO:

**GENUINE WHITE IRON SHOES AND DISS.**  
**PALMER, HANSCOM & CO.**  
**To Quartz Miners.**  
**Knox's Improved**  
**AMALGAMATING PAN,**  
WITH  
**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.  
By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the extracting of floating gold and silver, known to be other wise lost. Made exclusively by  
**PALMER, HANSCOM & CO.,**  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco  
The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

**T. C. Sanborn & Co.**  
**STOCK BROKERS,**  
No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**  
**GOULD & CURRY MINING STOCK,**  
**CHOLLAR MINING STOCK,**  
**CALIFORNIA STEAM NAVIGATION CO'S STOCK,**  
**BOUGHT & SOLD.**

**DEETKEN'S**  
**Chemical and Metallurgical Works,**  
On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED BY Chemical process. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATING PROCESS.  
Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for the purpose.  
nov8-3m

**LEWIS COFFEY AND RISDON,**  
**STEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.  
Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
LEWIS COFFEY J. N. RISDON.

**THEODOR KALLENBERG**  
**Maker of Models**  
**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps.** Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
San Francisco.

R. W. FISHBOURNE,

**PRACTICAL LITHOGRAPHER,**  
**ENGRAVER AND PRINTER,**

No. 540 CLAY ST. CORNER OF LEIDSDORFF,  
San Francisco. State and County Bonds, Stock Certificates, Bills of Exchange, Bills of Lading, Bank Checks, Land-scapes, Architectural and Marine Views, Show Cards, Labels, Etc., executed with neatness and dispatch. N. B. All orders in Crayon Work promptly attended to.

## MINING.

N. B. Mining Stock Certificates executed with promptness and dispatch, and at greatly reduced rates. J. S.

**MARTIN & Co.,**  
OFFICE--224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

**Purchase of Copper Ores,**

Assaying 8 per cent and upwards of Copper to the Ton.  
We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.  
Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

**HENRY MARTIN,** **J. F. GREENMAN,**  
New York. San Francisco.  
San Francisco Post Office, Box 1199.  
je 1.

**Tremont House,**  
418 and 440 Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles, WHICH SECURES TO OUR GUESTS QUIET.  
The prices for board and Rooms are very moderate--by the day, meal or week. WE SOLICIT A CALL FROM ALL.  
F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and returned the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.  
F. E. WEYGANT.

**LEANDER RANSOM,**  
**Civil Engineer**  
**AND**  
**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL LANDS,**

At the low price of \$1.25 per Acre.

Terms--Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct7-3m



**DR. H. AUSTIN,**  
**DENTIST,**

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices.  
je-29

To Mining Companies.

FOR SALE--A STEAM ENGINE AND BOILER. THE Engine is 30 horse power--10 inch cylinder--24 inch stroke--solid iron frame, with heater, pumps, etc., all complete. The boiler has 5 flues, is 24 feet long, 40 inches in diameter, made up from the best three-eighths inch Low Moor Iron, and weighs about 5000 pounds.  
Both Engine and Boiler are in perfect order and fully guaranteed. Apply to  
I. H. HAM, [No. 211 Clay st.  
San Francisco, June 13, 1883. 3t

**International Hotel,**  
JACKSON STREET, ----- SAN FRANCISCO  
[A few doors above Montgomery.]  
**FIRE-PROOF BRICK BUILDING.**

Most convenient to the Places of Amusement  
**OPEN ALL NIGHT.**  
City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**  
and sets as good a table as any House in the City. I am determined that the International shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

**John R. Sims,**



Oregon street, between Washington and Davis and Front and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and Shutters, Bank Vaults, Grating, Cemetery Railings.** All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

**Mr. Sims Appreciates the Past**  
liberal patronage of his friends, and trusts that he may continue to merit it in the future.

**For the Information of Strangers**  
he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attests. A large assortment of second hand shutters for sale at low rates. api3

**NATHANIEL GRAY,**  
**General Furnishing Undertaker,**  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

**FULTON FOUNDRY & IRON WORKS**

**HINCKLEY & CO.,**

MANUFACTURERS OF

**Steam Engines,**  
**QUARTZ, FLOUR AND SAW MILLS; CAST IRON**  
**FRONTS, FOR BUILDINGS, MINING PUMPS,**  
**AND ALL KINDS OF MACHINERY, ETC.,**  
**FIRST STREET,**  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*.\* All kinds of IRON and BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**W. T. & J. GARRATT,**  
**City Brass and Bell Founders**  
Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE**  
**and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."**

**SQUARZA'S PUNCH.**

**FIRST PREMIUM**

AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1882.

**ALSO; FIRST PREMIUM**

At the San Francisco Bay District Agricultural Fair, 1882  
MANUFACTORY, WHOLESALE AND RETAIL,  
No. 44 Leidsdorff street,  
Opposite the What Cheer House, San Francisco.

**San Francisco Machine**

**IRON WORKS!**

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON most reasonable terms.  
Steam Engines, High and Low Pressure; Quartz mills, Saw mills, Mining Pumps, Hoisting machines for mining purposes, Wine Presses, Agricultural implements etc., etc., and Castings of all descriptions made to order. Steam Engines exchanged and for sale by  
DEVOE, DINSMORE & CO.

REPAIRING promptly attended to.  
**FOR SALE.**

One Upright Post Drill, Putnam's manufacture. Also one thirty-inch screw Chuck,  
San Francisco, July, 1883. je13

**50 lbs. MARINE and**

**Fire-Proof Paint,**

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linsed Oil.  
For Bottoms of Vessels, use one part sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 60 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE:--Mix three parts Mineral Paint with one part white lead, thin with Linsed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:--Five parts of Mineral Paint, one part white Lead, mix with Linsed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,  
G. T. Forquz, Superintendent.  
**WORKS, North Beach; Office, 509 Sacramento st., San Francisco.**

**WRIGHT'S PICKS.**

JOHN WRIGHT, of Sacramento, has established himself in San Francisco, for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.--None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

**WANTED,**  
**GOLD QUARTZ SUITABLE FOR**  
**CUTTING JEWELRY,**

By **FRONTIER A. DEVIERCY,**  
13 ap 487 Pine street, San Francisco.

**FREDERICK MANSSELL,**  
**MECHANICAL & ARCHITECTURAL**  
**DRAUGHTSMAN,**  
No. 422 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

**HAYNES & LAWTON,**  
IMPORTERS AND DEALERS IN

**CROCKERY,**  
**GLASS WARE,**

**FRENCH CHINA,**

**Coal Oil Lamps, Table Cutlery**

**CLOCKS,**

**Silver Plated and Britannia Ware,**

**ETC., ETC., ETC.**

**NO. 516 SANSOME STREET**

[CORNER OF MERCHANT.]

SAN FRANCISCO.



## To Mining Companies about to Incorporate.

JOHN ARMSTRONG.

CONVEYANCER,  
610 Merchant Street,  
San Francisco.

Is Prepared to draw with Accuracy and Dispatch,  
Certificates of Incorporation—Trust Deeds,  
and all other Papers,  
necessary to the correct Incorporation of Mining Companies,  
on reasonable terms.  
All letters of enquiry cheerfully and promptly answered.  
Address as above. jy27

## New Style of Ladies' Buckle!

W. BOHM,  
INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It excels all other buckles in

### Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of

BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm," will be guaranteed as to its Strength and Durability.  
W. BOHM, Patentee.  
jy 27

## CALIFORNIA TOOL WORKS!

John Weichhart,

Manufacturer of

All Kinds of Edge Tools, Etc.,

Plane Irons Moulding Irons, Stone Cutter's Tools, etc.  
No. 22 Fremont street, bet Market and Mission,  
San Francisco, July 14, 1863. jy20

CHARLES GEDDES,

ARCHITECT,

Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms,  
San Francisco  
jy 20

MOYNIHAN & AITKEN,

Boiler Makers and Blacksmiths,

Mission, between Beal & Fremont Sts,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms.  
jy 29

L. F. LELAND,

STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

MYERS & DAGGETT'S

Mining and Stock Exchange,

No. 23½ B Street, Virginia City, N. T.

Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every description promptly and confidentially attended to

\*\*\* Abstracts of Titles Furnished, Etc.

## AGENCY

For the Purchase and Sale of

MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.  
je13

WM. FAULKNER.

H. C. KIBBE,

MINING SECRETARY,

Commissioner for Nevada Territory,

543 Sacramento st., cor. Montgomery  
(ARMORY HALL.)

EXCELSIOR IRON WORKS,

713 Sansome street,

Between Sackson and Pacific, San Francisco.

GALLAGHER & KENNEY,

Manufacturers of all kinds of

Architectural and Ornamental Iron Work,

Bank and Store Vaults, Safes, Doors, Shutters, Bal-

cony, Area and Cemetery Railings, Gates, Stairs,

Etc. and all kinds of Blacksmithing and Job-

bing done with promptness, and at

Reasonable Prices.

Orders from the country promptly attended to.  
je13

## APARTMENTS.

FURNISHED APARTMENTS, WITH, OR WITHOUT Board, at 1018 Powell Street, between Clay and Washington Street. Persons desirous of a respectable home will do well to apply.  
jy6

E. C. DAKE,

DEALER IN

CLOTHING,

AND

Gentlemen's Furnishing Goods;

ALSO

HATS, CAPS, ETC.

At THE NEW YORK CLOTHING STORE,

541 & 543 Washington st. Montg'my Bk  
je] Old No. 145. [29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY

PEASE, BOWLEY & CO.,

Real Estate, Stock and Exchange

BROKERS,

621 Montgomery street, San Francisco.

LEGAL TENDER NOTES AND MINING STOCKS,

BOUGHT & SOLD.

je-29

## PUMPS!

HARRISON'S

California Lift and Force Pump,

WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

### ALL SIZES;

Capable of throwing from ONE HUNDRED to FIVE THOUSAND Gallons per Minute—For sale by

O. H. HARRISON,

PHOENIX OIL WORKS,

je-15 517 Front Street, San Francisco.

## New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

SHEATHING COPPER;

BRAZIER'S COPPER;

COPPER BOLTS;

YELLOW SHEATHING METAL;

COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

MORGAN, STONE & CO  
je-29 108 Front Street, San Francisco.

## Napoleon Copper Mining Company.

Capital Stock.....\$1,620,000.  
2,700 Shares—\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACCRELLISH  
Secretary.....R. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....RICHARD TOWNING

### TRUSTEES.

F. MACCRELLISH, of Alta California  
M. ERLÉNBAUGH, of Greenberg, Erlenbach & Co.  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. BOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je29

## San Antonio Gold and Silver Mines, LOWER CALIFORNIA,

## FORWARDING & MINING AGENCY.

SAMUEL SMITH,

OFFICE—North West Corner of Front and Clay Streets, San Francisco.

MINING MACHINERY AND MERCHANDISE Forwarded. Mining Claims secured, through the resident Agent at San Antonio, and information furnished regarding any claim, in that Territory, on Commission.  
je-26

### PEOPLE'S

## Steamship Line!

Connecting California and New York  
VIA NICARAGUA.

750 Miles Shorter than any other Route!

The Fast and Favorite Double Engine Steamship,

MOSES TAYLOR,

J. H. BLETHEN.....COMMANDER

Will be dispatched for

SAN JUAN DEL SUR,

From Mission street Wharf.

THURSDAY, - - - - - JULY 23, 1863.

Punctually at 9 o'clock, A. M., on

Connecting at GREYTOWN with the Splendid Steamship

AMERICA - - - - - 2500 Tons.

Reduced rates of Passage and quick trips are secured by the re-opening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness and safety, and every effort will be made to insure the comfort of passengers.

For further information apply to  
I. K. ROBERTS, Agent,

## FOR SALE.

PATENT PRESSED RUSSIA IRON MINING PANS.

Russia Iron Quartz Screens for Mills;  
Portable Forges; Caudron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb's Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

## UNEQUALLED MONITOR COOKING STOVE OR RANGE,

FOR HOTELS.

To which we call particular attention.

je-29 TAY, BROOKS & BACKUS.

## The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF

COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,

LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1. ODD FELLOWS' HALL,  
je-14 Montgomery Street, San Francisco.

## ASSAYS!

Promptness and Accuracy Secured

BY THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

J. H. CHURCHILL, M. A.,

(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and Washington Streets, San Francisco. jy6

A. C. MORSE,

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

HAVING MADE ARRANGEMENTS with MIXER S. MARTIN Esq., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

Miners' Foundry

—AND—

MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS Machinery, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rate are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING  
San Francisco, February 23, 1863.

## New Patent Agency

WE HAVE CONNECTED WITH THE Publication of the "MINING AND SCIENTIFIC PRESS"

The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

Mining and Scientific Press Agency

The most desirable place to make application for Letter Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office.) San Francisco. EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building

EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate.

EWER & SMITH.

## PATENT RIGHTS.

Patent Rights Bought and Sold,  
At the office of the "Mining and Scientific Press" Agency.  
EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described the columns of this paper FREE of charge, they more furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors.  
EWER & SMITH.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, AUGUST 3, 1863. NO. 40.

#### AN IMPROVED FURNACE.

MR. EDITOR:—The following quotation from Wells' Scientific Annual, for 1863, gives many details of improvements required for converting fuel into a gaseous form before its application to heating. This forms the basis of one of the Norwegian methods for the treatment of Copper pyrites. It will therefore form a useful prelude to what I hope to send you, shortly, on this subject. In the recent International Exhibition, in London, metal was exhibited manufactured by this means, in other parts of Europe. Instead of the fireplace of the common reverberatory furnace, a 'gas generator' is employed.

"This consists of a circular chamber of fire-brick several feet deep, and two or three feet in diameter, closed at the bottom, and having a hopper at the top, through which the fuel is supplied. This chamber, at a certain height from the bottom, is in direct connection with the body of the furnace, so that flame may issue as freely from it as from the fireplace of an ordinary reverberatory furnace. In the sides of the generator, at a certain distance from the top, is a series of three or four small, round holes on the same level, and at some distance lower down is another similar series of round holes. These holes are for the passage of the air intended to support combustion in the interior of the generator, which is blown in either by a fan or some other convenient blowing-machine. Now, when the generator is full of incandescent fuel, and air is injected through the lateral holes, carbonic oxyd gas is copiously produced and passes into the furnace, as there is no other place of egress, the hopper at the top being supposed to be shut. As it escapes from the generator, it is met by a current of heated air, or as it is technically termed, 'hot blast,' which is injected downwards from the roof of the furnace at or near its junction with the generator, either in several jets or one continuous sheet. The carbonic oxyd while still hot is thus burnt, with more or less air at will. The air which supplies the generator is also previously heated; and in the Swedish furnaces the apparatus for heating the blast consists of a series of cast iron pipes fixed at the lower part of the stack. Hence only the waste heat of the furnace is employed for this purpose. It is usual to place a hollow cylinder of iron round the generator, so as to leave a closed space between its internal surface and the exterior of the generator; and into this space the hot blast is introduced, whence it passes through the two rows of holes previously described into the interior of the generator. The atmosphere of such a furnace can be rendered either reducing or oxydizing at will by regulating the amount of blast. At the bottom of the generator is a door, by means of which the ashes or clinker from the fuel may be withdrawn. These furnaces can be so modified as to suit any kind of fuel. A recent writer in the London Times advocates their use even for the burning of anthracite. He says, 'This kind of coal gives intense local heat, but this inconvenience might easily be remedied by introducing along with the air into the generator a certain proportion of steam. This steam would be decomposed, with the formation of carbonic oxyd and hydrogen gases and some carbonic acid, and a considerable re-

duction of temperature would be the result. But the heat thus removed from the chamber would be subsequently restored in the body of the furnace by the burning of the combustible gases derived from the decomposition of the steam, so that there would be no loss of heat, but only a transfer of it from the generator, where it is not wanted, to the furnace, where it is applied. The fact is, our mineral fuel has been so abundant, and so easily accessible, that it has been most cruelly wasted. But matters are not quite so smooth as they used to be, and necessity is beginning to compel attention from our iron-masters to the subject of economizing fuel in every possible way. The old reverberatory furnace is only a clumsy sort of gas furnace; but in the Swedish peat-furnaces the fuel may be converted into combustible gas, which may be applied under the most advantageous conditions."

#### A POOR CHEMIST.

#### ANCIENT AND MODERN EFFORTS TO DRAIN LAKE FUCINO, ITALY.

Those of our engineers who may traverse Southern Italy in the course of their travels this year, will find an interesting work proceeding in the northern provinces of Naples—in the Abruzzi—not far from the frontiers of the Roman States, in the works for draining Lake Fucino. This lake consists of a vast pool of water entirely surrounded by mountains. From very remote periods, attempts have been made to drain it without success. Last year, on the 9th of August, a company, founded by the Roman banker, Prince Torlonia, after eight years labor, succeeded in turning the waters of the lake into the river Liri, which flows into the sea, near Gaeta, through a tunnel about four miles in length. When the drainage arrangements are complete, nearly forty thousand acres of excellent land will be brought into cultivation; and thirty thousand inhabitants of the mountains, who are every year driven by the snow storms to take refuge and seek labor in Tuscany and the Roman States, will find employment in the drained bed of this lake. "Julius Cæsar planned the drainage of Lake Fucino," says an Italian writer; but the Emperor Claudius made the first attempt. Pliny describes the wonders of a tunnel following the sides of a mountain at a depth of a hundred feet. And it was, indeed, an astonishing attempt in those days, when the engineers had none of the appliances of modern science. Claudius employed thirty thousand men in the attempt for eleven years, and exhausted the public treasury. When he believed that his work was complete, he celebrated the event by one of the greatest naumachia, or water fights of the Roman times, in which nineteen thousand men, divided into two fleets, fought to the death, "to make a holy day." Claudius, Agrippina, and young Nero (who, a few months later, became master of the Empire,) the imperial court, and an immense crowd of spectators, were present at this fearful and imposing gladiatorial contest. When the play was played out, the dam which stayed the waters from the tunnel was removed, and they rushed in with a roar, but soon balled back. The tunnel was a failure! The cause of this failure re-

mained hidden for centuries. The work was recommenced under Trajan and Adrian; still later, by Frederick II., in 1240; by Alphonso I. of Arragon, in the seventeenth century; and, lastly, by Frederick I. of Naples, in the eighteenth century; but all failed. In 1826, Afan de Rivera, Chief of the Public Works in the kingdom of Naples, obtained leave to clean out the cut or drain made by Claudius. This work was finished in 1835, but the problem of draining the lake was as far off as ever. At length, in 1853, a Neapolitan company obtained permission to drain the lake, and take the reclaimed bed for their remuneration. On investigation, it appeared that the tunnel constructed under Claudius had not been so planned as to draw the water from the lake. The Emperor was cheated by his Minister of Public Works. The engineer of the modern company finally decided to destroy the Roman work, and make one of double the dimensions. Our account does not come down to the final completion. We suggest the subject to the attention of young tourist engineers and our illustrated periodicals.—*London Journal of Gas Lighting*, April 7.

CASTING AN ANVIL BLOCK, WEIGHING ONE HUNDRED TONS, AT THE MIDLAND WORKS, SHEFFIELD.—Messrs. Stanley & Co., iron founders, Midland Works, were occupied the greater portion of Friday in casting a monster anvil block, weighing one hundred tons—by far the largest casting ever made in England. At an early hour the workmen were busily engaged at the furnaces and in the foundry getting everything in readiness for the actual operation of casting, which began about eight o'clock, and continued under the personal superintendence of the Messrs. Stanley, until three o'clock in the afternoon. The mould—to the uninitiated only an immense hole in the earth—was situated in the centre of a spacious casting room, having on each side a powerful crane, by which the molten metal was conveyed in ponderous "ladles" from the furnaces to the mould. As the burning flood rolled into the fiery pit, sheet of flame and clouds of smoke rose seething and scorching from the mass, and innumerable stars of strange beauty and brilliancy darted forth in every direction, to the manifest disquiet of the mere curious spectators who had approached venturously near the spot. There were many gentlemen and several ladies present, and great gratification was evinced at the scene they witnessed—not forgetting the manly readiness and energy with which the grimy and perspiring workmen performed their important and often dangerous parts. About a quarter past two o'clock the "dross" which had accumulated upon the surface of the metal in the mould, now almost full, was dragged off, and the top of the mould closed over, the remainder of the requisite metal being poured into it through a central aperture. The metal run from two large cupolæ and two air furnaces. The anvil is intended for a 12½ ton Nasmyth's double-acting steam hammer, resting on a foundation of oak blocks, eleven feet square by four deep, and one hundred and twenty large piles driven ten feet into the ground by steam power. The hammer is for forging the homogeneous metal for the large Whitworth guns and projectiles, marine engine cranks, and other shafts weighing from five to eight tons each.—*Sheffield (Eng.) Tel.*



## MINING CORRESPONDENCE.

EL PASO MINING DISTRICT, LOS ANGELES CO.,  
MESQUIT SPRINGS, JULY 12th., 1863.

Messrs. Ewer & Smith:—On Friday, the 9th. inst., Sackett's Express arrived from Los Angeles en route for Salt Range, and brought me a fine lot of your papers posting me up to the date of No. 34.

On Saturday morning I walked to Ophir City, fifteen miles from here, situated at the extreme north end of this district, to see what was going on there, and obtain specimens for your cabinet. I started between three and four in the morning, lost the trail, but found and followed the wagon road which made my trip three miles further than by the trail.

I found there six camps pitched around in a square of an acre of ground, on the side of the mountain called Laurel Hill, with a fine spring at one corner of the square, at an elevation of 150 feet, or more, above the plain.

I find the task of collecting specimens far more laborious than I expected, but I intend to persevere till I have a goodly number in your hands.

I hope you will label all that I send, that they may make a fair show for our district.

As the cost of forwarding fifty specimens would be but a trifle more than for twenty, I shall wait till I have gathered all I can conveniently, and will endeavor to give a description of their appearance.

There are but three lodes being developed at this time. These are the Milliken, No. 1., Manzanilla and Newport, and but little has been done on them, as they are approaching them by tunneling and of course can show no rock from below the croppings. Work will be commenced on the Tucker or "Iron Clad Company's" lead soon. It is so hot here, (July 14th., 10 A. M., the thermometer shows 108° in the shade,) that men cannot work outside, so nearly all are laying off, waiting for help and tools.

C. W. TAPPAN.

HUMBOLDT.—Where are our Humboldt correspondents? We have not heard from them for some time. We have learned incidentally however, that several letters have been addressed to this office, and that the writers are complaining of their non-appearance in our columns. The letters referred to never came to hand. There is a screw loose somewhere; all right, however, at this end of the line. We hope soon to be able to post our readers again in regard to the condition and progress of mining interest in Humboldt.

THE UNITED STATES TUNNEL AND MINING COMPANY.—This Company have been long engaged in prospecting their mine, and are now about to be rewarded for their toil and expenditure. After running their tunnel 1,600 feet, they have now struck rich quartz in veins of about six inches in diameter, with every prospect of soon reaching the main lead. About \$30,000 have been expended upon their tunnel. Enterprises of this character deserve a rich return.

COPPER MINING ABOUT MOUNT DIABLO.—The work goes steadily on, and in a number of claims the owners seem to be on the eve of realizing a full reward for their labor. Very fine specimens have been shown us from Mount Zion, and we learn that the company have several tons of ore sacked ready for shipment. The Keokuk, Last Chance, and a number of others, including the Hall claim, in Alamo District, have obtained the most encouraging results thus far.

SANTA CLARA.—The news from all the prospecting companies in the hills around Santa Clara is encouraging. At Lexington they are progressing, and are sanguine of striking the vein. Bituminous coal of an excellent quality has also been struck, and no doubt is now entertained of its being in paying quantities. Several influential citizens of this place have been out to a copper discovery—the Savage claim—and a company is formed to thoroughly explore and develop it. The prospects are said to be better than they were at Copperopolis.

The oil springs at Lexington, it is said, are to be developed, and an excellent article of crude oil has been brought in from the springs.

## THE PLAN OF CREATION.

BY PROFESSOR AGASSIZ.

The animal life of our globe shows that it has been formed with the design of bringing forth man as its last and highest creation. The history of the earth during those inconceivable periods of time before the human race was created has been traced by the united labors of astronomers and geologist.

By the theory of Laplace, which is now generally accepted, it is supposed that the solar system once existed as a nebula, a vast distended flat mass of fiery particles of matter, revolving upon its axis. As it cooled it contracted, and threw off rings on its outer edge, like the rings of Saturn. These were then drawn together into globes of molten matter.

Between the time at which the astronomical history ends and that at which the geological begins, there is a period which has not been examined, because there is no man competent to undertake the investigation. As frequently happens in science, we must wait for another generation to be educated for this work; for, learning the art of investigation is the labor of a lifetime.

Geology finds the earth in a state of igneous fusion. In examining the rocks of the earth we find that they consist of two classes. Those of one class are formed in layers like the leaves of a book, while those of the other class are simple masses without stratification.

The stratified rocks were formed by being deposited at the bottoms of seas and lakes. Let me present some of the evidence by which this fact is known. All except the very oldest of the stratified rocks are filled with animal remains—especially with shells. Now we find these remains always lying upon their broad surfaces. If a shell falls through water and rests upon the bottom, it will not rest upon its edge, but upon its side; and the fact that the shells contained in the rocks always have their broad surfaces parallel with the planes of stratification is one of the proofs that these rocks were deposited in water. Many of these rocks now lie in a slanting position upon the slopes of mountains, but as we find the shells which they contain with their broad surfaces parallel with the planes of stratification we have no doubt that these rocks were formed and hardened in a horizontal position.

The stratified beds have been raised into a slanting position by the rocks from below being pushed up through them. The central mass is of unstratified rock, with the stratified rocks lying upon its sloping sides. We know that these rocks have been raised in this manner, not merely from the broad surface of the shells being parallel with the planes of stratification, but also from the fact that we find the same kinds of rock lying one on another in the same order on both sides of the mountain.

When the unstratified rocks were forced up among the rocks lying above them, they were in a state of igneous fusion. This is shown in the fact that they have run into and filled the crevices and cavities in the stratified rocks, which they certainly could not have done if they had been in a solid state. The fact is farther proved by the alteration which they have made in the portions of the rock with which they came in contact. We know that if marble is put into the fire it will be reduced to quicklime; and that if sandstone is highly heated it is formed into coarse glass. The effects of heat upon rocks of various kinds is well known, and we find these effects wherever the mass from below has broken through the stratified rocks. There can no doubt that that mass was in a state of igneous fusion.

All over the world the highest mountains have been raised up since the lower ones. The oldest mountains on this continent are the Capotian, extending in an easterly and westerly direction north of the great lakes. The Appalachian chain is older than that of the Rocky mountains. So in Europe, the Alps are newer than those of less elevation. This is what we should have expected if we had reasoned on a sound basis. When the hard crust of the earth was comparatively thin, it would yield to a slight force of upheaval, but as it became thicker from the gradual cooling of the globe, it would require a greater force to break it up, and, consequently, the forces accumulated and produced proportionally greater effects.

When we find one rock which has unquestionably been deposited upon another rock, it is manifest that the one ly-

ing below was formed first; and thus we are furnished with sure evidence of the relative ages of the rocks. The successive layers of rock are like the pages of a book, arranged one after another in regular order.

Now let us take a general view of the history of animal life, as preserved in this record. The rocks of the earth are naturally divided into several classes, resting one upon another.

At the bottom we have the unstratified rocks—granite, sienite, trap, &c., and above these the stratified rocks named generally from the localities in which they come to the surface.

The lowest of the stratified rocks contain no animal remains, and are therefore called azoic. But in the silurian we find four orders of animals; the radiates of which the starfish and the coral are samples; the moluscs, to which the oyster and clam belong; the articulates, embracing the lobster and all insects; and even the vertebrates are represented in certain low forms of fishes. This commencement of the creation of animal life upon these four modes of structure shows the formation of a determined plan from the beginning—a plan that embraced the creation of man as its final culmination.

The three lower orders are represented by all the classes which now exist, but at the beginning there was only one class of vertebrates, the fishes. After a long time the reptiles were created, then birds, and finally animals, to which class man belongs. The lower orders are not represented in the older rocks by the same species which now exists, but even in these there has been some degree of improvement—a general tendency to a higher and more complex structure.

The several species have not been gradually developed one out of another, but in each case a new creation has succeeded to the old.

The rocks nearest the mountain being the most inclined in this way, then other rocks lapping over them and less inclined, till we come to the upper rocks, which are generally horizontal or nearly so. As the shells in these rocks and other evidences prove that they were all deposited in a horizontal position, it is evident that they have been inclined one after another by successive upheavals of the mountain. The injection of a vast mass of matter in a state of igneous fusion must have destroyed all animal life in the adjacent waters, rendering a new creation necessary. The persistent following of the same plans through all of these successive creations shows the existence of a preconceived design.

DISCOVERY OF A CAVE IN WASHOE.—The Virginia Union has the following:

J. W. Rawlinson, of Palmyra Dis't, called upon us and gave us the particulars of a strange discovery which was made in that District last week. A party of three men were out on a prospecting tour, between the towns of Palmyra and Como, when they were startled at making a "strike" of a character far from being anticipated, in fact, no less a great natural curiosity than a large cave. The entrance to it is by a long hall, or natural tunnel, about 400 feet in length, and varying in width from 10 to 100 feet; at several places widening into small chambers; the sides are for almost the whole distance, of solid rock and in several places worn so smooth that it is almost impossible to believe that it has not been done by the hand of man. At the end of this, is a chamber the sides of which are rough and broken, but of great height and size. Leading from this are four other short avenues, or halls, some of them so low that a person is compelled to crawl through them, each of them, however, widening at only a short distance into small chambers. There are supposed to be other chambers, and probably of great extent, but at the time Rawlinson left it had not been sufficiently investigated to determine this. The most important and useful part of the discovery, however, is that there were also discovered, far in the interior of this immense cavern several splendid looking silver and gold bearing ledges, and numerous excellent indications. When these facts became generally known in the neighboring towns, great excitement was caused, and there was a tremendous rush of fortune seekers for the new land of promise. Claims were located in every direction, and the search for new ones was still continuing. This adds still another to the many natural curiosities to be seen in our wonder-producing Territory.



## NICKEL MINE IN ITALY.—FOREIGN MINING AND METALLURGY.

A joint-stock organization for working nickel bearings at Crivino has just been formed, under the title of Boulart, Boucher & Co. The capital of this enterprise is £29,000, divided into 1,450 shares, of £20 each. Nickel is a scarce and dear metal, the use of which is everywhere extending. The governments of Belgium, Italy and Switzerland have introduced it into the composition of a portion of their coinage, and it is more especially in the mixtures with copper, tin, zinc or cobalt that it is utilized. The works which apply themselves to the treatment of this metal are not very numerous; there are some in England, one in Belgium, and several in Germany; but this branch of metallurgy has not a greater development, in consequence of the absence of sufficient supplies of nickel minerals. Some workings of nickeliferous minerals exist in Germany and Italy, and it is in the province of Susa, in this latter country, that the Mine of Crivino is situated. To pronounce an opinion on a mining working is always a difficult and delicate matter, as, independently of special knowledge, a perfect study must be made of the locality. But Signor Sella, engineer of the district in which the Crivino mine is found, and formerly Finance Minister, observes: "The undersigned concludes that the works executed by M. Boulart have shown an arsenious vein of cobalt and nickel in a gangue of dolomite lime, quartz, and talcous and winding schists, with which it is intermingled. This vein inclines almost vertically to the West, and the metalliferous threads which it comprises vary in power from a very minute fraction to five-eighths of an inch. The undersigned is of the opinion that the works executed up to the present time have presented sufficient indications of a mine of nickel and cobalt; and, although the metalliferous power of the mine may not be considerable, yet having regard to the high price of nickel a very small quantity will pay the expenses of extraction, and the undersigned, therefore, hopes that the Crivino Mine can be worked at a profit, and believes, in consequence, that it may be declared open in accordance with the terms of the 15th Article of the Code of 1814." After having indicated the analogy existing between the Crivino Mine and that of Usseglio, Signor Sella observes that the discovery of veins on the extreme limits of a formation of cobaltiferous and nickeliferous veins may involve a fair presumption that a fine future is in store in connection with their working.—*London Mining Journal*.

## THE PYRAMIDS—HOW BUILT.

Herodotus, who visited Egypt 445 B. C., gives us some account of the herculean labor there performed. The stones were brought from the mountains on the opposite side of the valley of the Nile. The first work was a giant causeway or road, over which these enormous stones could be transported. Ten years, he says, one hundred thousand men were employed in this part of the work. After the building of the road came the levelling of the rocky hill, the cutting out of the subterranean chambers, and the elevation of the huge masses of stone. This, the same writer says, occupied three hundred and sixty thousand men twenty years longer! The first layer of stones were easily put in their places: the second were elevated by the aid of machines or derricks. Then, as the heights of the mass progressed there were a series of broad steps, corresponding to the number of layers of stone; as the work proceeded, these machines were planted along the ascent and the stones elevated from step to step.

Such is the structure we have come to examine, and which now stands before us in all its huge proportions. What an immense labor! What countless years of human toil! What a story of crushing despotism and hard earned slavish servitude! But they were built, and here they stand, and here they have stood for thousand of years, defying the wasting hand of the barbarian, the storms of the desert, and the lightnings of heaven; looking down in proud contempt upon the fierce conflicts of human passion, and conquering nations have come to deluge with blood, and heap with carnage those beautiful plains above which they lift their lofty heads!—*Israhelite*.

Tobacco smoke blown into to the wound is said to be a sure cure for the lockjaw.

## TO MINERS AND PROSPECTORS.

In view of the frequent accidental discoveries of valuable mineral deposits, other than gold, in almost every section of the State, which have of late been made, it is but reasonable to suppose that prospecting even in California, has but just commenced. The simplest and most universal of all metalliferous deposits is gold. It rarely occurs in any other form than that of "free gold" which is readily discernable to the naked eye. An examination of any rock or earth for gold is an extremely simple process. If its presence is suspected in alluvium, the simple washing of that alluvium in a pan is an invariable test. If in rock of any description; that rock pounded fine in a mortar and washed, in the same manner as alluvium, will usually expose its gold to the naked eye, if there is any there in paying quantity. The only exceptions, are where the gold is contained in iron pyrites, or copper pyrites containing also iron. In either of the two latter cases the presence of gold may be readily ascertained by placing the pyrites in any suitable vessel and keeping the contents at a moderate heat for from four to six hours, with frequent stirrings, by which means the sulphur will be evaporated, and the copper, if any is present, changed to a dull red color, and the gold retaining its natural appearance, on subjecting the whole to the usual panning process, may be readily seen by the naked eye.

Not so with other metals. Silver, copper, zinc, nickel and many others appear in such a great variety of metalliferous forms as generally to defy all but the most practical and scientific eye. No description of these ores can be written which will afford any very important aid to the inexperienced in making explorations. After reading descriptions, however, and carefully examining the specimens described, the explorer may go out and search with some degree of confidence and intelligence. A study of the characteristics of the sulphuret ores alone, would lead an explorer to pass over, entirely unnoticed, the richest varieties of the ores known as Chlorides or Horn Silver, which, from the facility with which they may be worked, and their usual richness, are generally considered the most valuable of silver ores. There is much reason to believe that this variety of silver ore will be extensively found in all the volcanic regions of this State. So with many other ores.

Considering the great difficulty, in the present lack of cabinet collections, and other means of instruction, to acquire a practical mineralogical and geological education in this State, and desirous to aid, to our fullest capacity, the development of our mineral resources, we hereby make the offer to miners, prospectors and all others, who in their travels or explorations may come across specimens having the appearance of rarity or value, to carefully examine and pronounce upon the same, free of charge, as to their characteristics, value, etc., whenever any such specimens are brought or sent to this office free of cost to us. We have already been called upon in many such cases, and we shall at all times be willing to give our attention to any such requests which may be presented to us.

In carrying out the plan we propose, every miner and prospector should be at all times on the lookout for any new mineral. The ordinary rocks with which the miner meets in his travels and labor, and which possess no mineral value are usually well known. Whenever a rock presents any unusual appearance in conformation, color or other characteristic, attention should at once be given to it. There is scarcely a piece of quartz or rock of a quartzose nature, which presents any uncommon appearance in texture or color that has not been thus modified by the deposit or intrusion of some mineral substance. If such rock is found upon or near a vein of quartz it should be carefully examined "in place," and if the cause of its peculiarity is not evident and readily seen, it should not be passed carelessly by. There may be value in it, although the gold may not shine there. We shall commence in our next issue a series of articles describing as accurately and as intelligibly as possible all the ordinary mineral substances which may be likely to come under the notice of the California prospector. These articles will be published under the head of "THE MINER'S LABORATORY," and will be found of great value to the mining public. [*Mining and Scientific Press*, April 20.

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an annual loser of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The same amount of practical information, important to miners and mechanics, which is contained in a volume of the Press, cannot be bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you ever send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable reading matter, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the Press for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.

## Our Mint, its Rules, Charges and Operations.

For parting silver from gold when gold is below 300-1000ths fine ..... 3cts per oz.  
" from 30-1000ths, to 750-1000ths fine. 7 cts " " oz.  
" " 750-1000ths to 950-1000ths " 14 cts " "

## DEPOSITS SILVER BULLION—PURCHASES.

\$1.21 per standard ounce  $\frac{1}{2}$  per ct. on gross value of all gold contained for coinage.

Refining charges (only where gold is contained) proportion of gold 1 to 300 3cts. per oz. gross weight  
301 " 500, 7cts, " " "

## DEPOSITS FOR FINE BARS

\$1 16-4-11ths cents. per standard ounce,  $\frac{1}{2}$  per ct. gross value of silver for making bars; also when gold is contained  $\frac{1}{2}$  per ct. on gross value of gold for coining. Refining charges as in purchases.

## BARS SOLD FROM REFINERY.

\$1 21cts. per standard oz.  $\frac{1}{2}$  per ct. gross value to be added for making bars.

## DEPOSITED FOR DOLLARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value for coining, when gold is contained, refining charge the same as in purchases.

## DEPOSITED FOR IMPORTED BARS.

\$1 16-4-11ths. cents per standard oz.  $\frac{1}{2}$  per ct. gross value of deposit for making bars.



## THE MINERS' LABORATORY.—NO. XII.

## SILVER.

Before describing the various ores of silver, it would be best to place before our readers some of the most prominent and characteristic tests for that metal, and in order to do so we must suppose that the miner has made a solution of pure silver by dissolving it in nitric acid—dissolving, say 20 grains in about  $\frac{1}{2}$  an oz. of acid, and adding 3 oz. of pure water to the whole, and dividing the solution into six equal parts, then proceeding as follows:

To No. 1, add a solution of Sulphurated Hydrogen, which will produce a black precipitate or sediment.

To No. 2, add Sulphate of Ammonia, which will produce the same kind of reaction as No. 1.

To No. 3, add Hydrochloric Acid (Muriatic Acid or Spirits of Salt), which will produce a kind of white curdy precipitate or sediment—this sediment will disappear on adding to it a small quantity of liquor ammonia, and will reappear again on adding to it a few drops of nitric acid.

To No. 4, add a solution of Chlorate of Potash which will produce you a brick red precipitate or sediment. This is a very characteristic test for silver in solution.

To No. 5, add a Solution of Potassa, which will produce a brownish black precipitate or sediment. If you collect this sediment on blotting paper, dry it, and heat it in a small dish, you will convert it into metallic silver.

No. 6.—In this portion place a strip of bright Copper for a few moments, and silver in the metallic state will be deposited on it.

It would be well if all parties intending to test minerals for silver, would make themselves thoroughly familiar with these reactions. Other metals giving almost similar reactions, parties, not thoroughly acquainted with the tests for pure silver, are liable to be misled, and to think that they have silver when in reality it is some other metal. In order to illustrate this more plainly, we will suppose ourselves, for a few moments examining the contents of several bottles for silver. In the first place we would label these, No. 1, 2, 3, 4, &c., we would then take a portion of No. 1 bottle and add to it a solution of Hydrochloric acid—a white precipitate would lead you to think that No. 1 was the bottle which contained silver in solution. But in reality it may be either silver, lead, mercury, antimony, or bismuth, and our next point would be to ascertain which of these metals are in solution. This can be proved as follows: Pour the clear liquor from the sediment and boil the sediment with about  $\frac{1}{2}$  of an oz. of Hydrochloric acid for a few moments. If the precipitate dissolves, then it was not silver, but antimony or bismuth. Should it not disappear, pour the clear solution away, and boil the sediment a second time with considerable water, say 1 oz. Should the sediment dissolve, then lead was in solution, and not silver. Should the precipitate not dissolve, pour the clear liquor away again and add to the same sediment liquor ammonia. Should the sediment turn black, then mercury, but if it dissolves, leaving a bright clear solution, then silver is the metal held in solution.

In our next issue we shall describe the ores of silver and how to discover the presence of that metal in such combinations as the miner may come across; but we will say that it is absolutely necessary that he should first be thoroughly acquainted with the tests and reactions of pure silver as laid down by me in the commencement. P.

**COPPER ORE.**—Copper ore of a rich quality has been found in British Columbia. A lead of native copper has been discovered within ten miles of Victoria.

**THE EDITOR** has been absent from his post during the past week on a short trip to the copper mines of Calaveras and Amador.

**CARIBOO.**—Many of the claims on William's Creek, B. C., are paying enormously. Some yield over a hundred pounds of gold per day.

**THE PACIFIC MONTHLY.**—The Pacific Monthly for August, is out. Among the good things contained in it, is a list of "The Prominent Men in California in 1846," by Thomas O. Larkin, Esq. This must be interesting to all new-comers, as well as forty-niners.

[For the Mining and Scientific Press.]

## THE APPLICATION OF PHOTOGRAPHY TO MINING.

When St. Victor first made his experiments in the application of light to sensitized surfaces, and aided by Daguerre, worked out the great problem which they were both endeavoring to solve, he little thought what an immense advantage would arise to the world at large, from his making a practical thing of the action of light upon metallic oxides.

The casual observer as he passes the numerous groups of photographic pictures which meet his gaze in almost every street, looks upon the art as something that panders to the vanity of the multitude, or tends to keep alive the bonds of memory. Even the most practical men, those who are engaged in the development of the resources of the country, in their hasty conclusions, deem that the work of the photographer, is but an idle occupation, and of no actual benefit save to the operator himself.

But while the astronomer takes pictures of the sun, moon and stars: while the mechanic obtains views of his machinery, so perfect in perspective, so accurate in proportion and detail, that they may serve as working plans; and while the architect produces admirable representations of the buildings he constructs, all, with the camera, the mining engineer also does in many instances avail himself of the same method to illustrate the advances he has made in his labors, and to show the grounds upon which he is working.

It is seldom that the Board of Directors ever visit the mine; the stockholders themselves rarely travel thitherward; and all the information which they gain of the progress of the work, or the character of the country at the mine, is derived from the terse and sententious reports of the manager. Did the manager understand the use of the camera, a knowledge which is very easily acquired, he could show from actual views, the progress made in his work, weekly, or monthly, as might be desired. He could present pictures of the mine and its surroundings, show the bearings of the outcrop, the trend of the vein, the features of the adjoining country, and in fact, each, and every minutiae, that would aid greatly in satisfying the Board of the correctness of his system, and in familiarizing them with the property whose interest are in trusted to his guidance. When the construction of buildings or the erection of machinery is progressing, a few minutes work with the camera, at the close of each week, will show the exact stage of the advance made since the last view was taken. So much wall has been built, so much machinery has been put into position, so much excavation has been made, and the quick action of the camera has told the story more plainly, more truthfully, than a volume of words could do.

Much of the value of the vein, can be foreshadowed by the physical features of the country in which it is situated. If easily accessible, even a low grade of ores could be worked profitably, while those which might be very rich, would, from the expenditure necessarily entailed upon them, by the difficulties of their position, never be remunerative. Here the camera becomes useful in its correct delineations of the surface, showing to those who reside at a distance from the mine, the actual position of the vein, and the facilities of approaching it. It is true, that an absolute necessity does not exist, for these features of the mine to be presented to the notice of the Board, but it cannot be doubted that the more fully they understand their property the better they will be able to manage it. It is not possible for all to visit the mine, and by actual inspection, and examination, make themselves conversant with all the local details of it; but they can avail themselves of the aid of this branch of science, and bring, as it were, the mine to their own offices, or firesides, and inspect it at their leisure. Those who have seen the views, which have been taken from time to time, by the different artists of this State, of various mining localities, can readily understand, how greatly such delineations must aid in a correct estimate of the value of such properties, by those who cannot visit them in person. Nor is it necessary to be encumbered with costly or heavy and clumsy apparatus; a light and portable camera, with the stand upon which to place it, so light, that both can be carried with ease by sustaining their weight upon two fingers of the hand, with lenses that can be readily carried in the vest pocket, can readily be obtained at any of the photographic warerooms. The writer of this article has a complete apparatus, which is packed in a box about one foot square, containing the camera, glasses for pictures, lenses, and the requisite chemicals; the whole of

which does not weigh over a dozen pounds. And often in journeying through mining districts he has stopped his mule, taken a view and in eight minutes been again upon his journey.

Such is the progress made in the art, that plates are now prepared which may be kept for years, if not exposed to the light, and then be placed in the camera, and a view taken upon them. This advancement in the art, precludes the necessity of carrying bulky packages of bottles and chemicals, while travelling, to obtain good views, and thus places it in the power of any who are so disposed, to bring back with them picturesque delineations of the scenes through which they have passed. It can be rendered practically useful by illustrating the progress of work upon the mines. L.

## CALIFORNIA'S WANTS.

California wants two hundred thousand pair of working hands, one hundred thousand brave and hardy men who are neither too proud nor too lazy to work, but who are willing to labor and wait for the sure results of honest toil. Between the grey ribs of granite, lie buried millions of precious metals which nothing but the strong arm, the drill and the pick, together with the aid of mechanical industry, can bring out; but besides all this mineral wealth California offers a climate and soil adapted to the production of all kinds of cereals as well as fruits and flowers, the rose and the cactus, the fig and the almond tree here flourish; while fields of wheat and barley present to the eye an unbroken surface. With a bracing climate and Italian skies, giving strength and energy to the enervated frame of man, we cannot conceive of too extravagant speculations as to the future of California's developments. Her alluvial and mineral wealth seem to be inexhaustible—almost every day we hear of new discoveries of the precious metals—"Struck it rich" is the phrase which arouses whole communities, and sways the multitude as by some mighty magnet, leaving whitening fields ready for the harvest, uncut, whole settlements depopulated, houses to rent or for sale at low prices; such sudden outbursts of splendid prospects, too often disappoint the wild adventurer, and too soon he finds that he has torn down what he had commenced to build on a sure basis. California does not want such a class of men as those; she has enough of these wild adventurous speculators already. She wants men of iron nerve and sinew, with perceptive faculties to know when they are well off, and "let well enough alone"—men who are "willing to labor and to wait," for results which will surely be remunerative to them, by application and patience. To all such, whether they come from the North, the South, the East or the West, California extends her hands, and bids you welcome.

## OBITUARY.

We are pained to be called upon to record the death of the Rev. BENJAMIN BRIERLY, who departed this life, July 21, 1863, in the city of Nevada, Cal. "Men die, yet their deeds live after them." When good men die, society feels the shock. So with California—she has suffered an irreparable loss, in the death of Mr. BRIERLY. The Church has lost a mighty champion for her rights, Vice and Irreligion, an uncompromising foe; the poor and despised have lost a friend, and one who would not stop to enquire "Of how much sin are you guilty?" but who was ever ready to relieve the necessities of others, to the sacrifice of his own comfort and ease. Many thought him too easily deceived in his charities, but his motto was "Better be deceived many times than to be mistaken once." In religion, he had a childlike faith. Though he has found a grave on California's shore, far from his own native Isle, yet his confidence was in God, and thus neither time nor space could serve to separate him from His presence. Who would fear to die, after life's work had been so well and faithfully done?

**A HEAVY FALL.**—The Territorial *Enterprise* of the 21st ult., is authority for the following:—

Adam Simpson fell down the shaft of the New York Company, 238 feet, night before last, broke his wrist and bruised his head somewhat. Dr. Sharky set the broken bones, and the patient was doing well at last accounts.

WITHIN the last year over eight million dollars in gold dust has been received at the New York assay office from Pike's Peak.



## THE MINING SHARE MARKET.

The activity in the Mining Share Market for the previous week, has been more than sustained during the six days, just past. The buoyancy of the Market has also been particularly noted. The business transacted exhibits a wide range and embraces quite a large scope of leading shares, these latter have been well sustained, by reason of flattering accounts from the mines.

Having been absent from our post, the past week up to the morning of publication, in lack of personal observation, we quote freely and without further credit, from our contemporaries, *The Mercantile Gazette* and *Sanborn and Co's* circular:—

Ophir Shares have been in demand, commencing at \$2000, and gradually improving to \$2350. This sudden recovery on the closing depressed rates of last week, is accounted for by a new discovery of rich ores to such an extent that the company may be induced to declare their regular dividend on the 6th instant, instead of omitting it, as was anticipated. It is announced officially that after September 1st, the dividends will be paid in New York, by Eugene & Co., on the same day they are paid here, less exchange.

Gould & Curry Shares have been sold at \$5275; at the rate \$5300 is offered.

The Mexican Company are vigorously at work upon their new shaft, it having already attained a depth of fifty ft. It is fifteen feet long by five wide and will contain apartments, each four feet square.

Savage Shares have advanced to \$3500, on time. Arrangements have been completed with three Mills for the working of the ores, and, with ordinary success, a dividend of \$75 per foot may be expected for August. Shares are inactive, but well maintained.

Hale & Norcross has advanced \$200 the past ten days and is at present very firmly held at \$2200; \$2300, buyer is bid. This claim is now being thoroughly opened, and new drifts run in several directions to extract ore upon a large scale; a number of mills are constantly engaged in crushing rock from this mine.

Holzer Shares are growing more in favor, and new buyers are ready to pay \$1250. The largest holders are the most sanguine, and cannot be persuaded to part with their stock at much higher rates.

Potosi Shares have been freely dealt in, and have readily commanded \$700 to \$725, most of which have been taken by old holders, notwithstanding the influence of the adverse action of the Grass Valley Company.

Grass Valley is offered at \$255 per foot. Very valuable claims have been found lately (on ground not in litigation with the Potosi Company) giving employment to two or three men.

White & Murphy Shares have been sought after at \$550, without finding much stock.

Best & Belcher Shares have not been offered at less than \$600, and Dick Sides could be sold at \$650.

Sierra Nevada, improved to \$71½; at the close very little stock is offering.

Grass Valley Shares have again been largely dealt in, fluctuating from \$250 to \$170; at the close they advanced to \$195. Fully in this stock is anticipated at an early day. This appreciation is occasioned, it is said, by the probability of there being no dividend for the ensuing month. Dividends of 100 feet, for August, sold at \$1 to \$1½.

Burning Moscow, improved to \$146, and declined to \$120. North Potosi Shares receded to \$42½, and closed at 47½. Lucerne sold at \$26; Lady Bryan reached \$15, and closed at \$12; St. Louis, in demand at \$31¼; Charles City declined to \$52, closed at \$61; Meredith, after selling at \$57½, closed at \$51.

EMERALDA SHARES have attracted more than usual attention during the past week. Wide West has been quite active and Antelope in request. Real del Monte has been in good repute and found buyers at \$225.

Real has improved because of the failure of the suit brought against the Company by the Real del Monte Co. There are no transactions in the stock, but it is firmly held at material advance.

Antelope has revived somewhat, advancing from \$70 to \$80. We append a record of the leading transactions of the

Wide West, 320 shares sold from \$145 (at \$180; Antelope, 10 at \$200; Esmeralda, 30 at \$20 (at \$22; Real del Monte, 25 at \$225; Silver Hill, 95 at \$35 (at \$36; Utah, 25 at \$70 (at \$80; Nevada, 10 at \$20; Pond, 102 at \$21 (at \$27½; Federal Hope, 102 at 40c to 50c; Red, White and Blue, 32 at \$10 (at \$11; Josephine 127 at \$10 (at \$15; Coso, 20 at \$20; Willow Springs, 145 at 4 (at 5¼; Sanborn, 16 at \$2; Bodie Bluff, 75 at \$4; Union, (Rus. District) 916 at \$3½ (at 4½).

HUMBOLDT & REESE RIVER still continue to attract much attention. It is stated that seven mills will soon be in operation at the latter locality, from which important developments may be confidently anticipated at an early day. We append such transactions of the week as have come to hand:—Sheba, 250 at \$220 (at 275; De Soto, 30 at \$60; Reese River, 30 at \$1¼ (at 1½; American Basin, 30 at \$15; Calcedonia Tunnel Co., 40 at \$46 (at \$48; Croesus, 70 at \$10; St. Charles at \$1¼.

## COPPER.

Since our last we hear of valuable discoveries of Copper in Mariposa, and Merced counties which are very flattering, and the mania for locating feet unexampled. Fifteen miles of claims have been staked off. Shafts have been commenced and work is progressing.

In Trinity county prospecting continues and miners are sanguine that rich Copper mines will soon be developed.

From Del Norte we hear of profitable workings. The Alta are shipping ore and rapidly developing their lode; 4000 barrels of ore go forward on the Mary L. Sutton to New York.

At Mount Diablo the numerous companies prospecting their claims continue with unabated zeal to tunnel, and sink shafts.

It is estimated that the Copper mines of Calaveras county will soon afford permanent work to thousands of laborers. The Union continues its large yield of shipping ore, and the stock still appreciates in value.

The Keystone has been largely increasing its shipments and extending its working operations. The Calaveras and Empire are also steadily progressing. At Camp Seco the mines are doing well. The Copper Hill is shipping in fair quantities.

The Napoleon has produced this month about 200 tons of ore, and the amount is being increased as room is made underground.

The last assay of forty-five tons, was made at an average of 17 per cent; 200 tons of ore from this Company's mine go to New York per the Mary L. Sutton, to sail in a day or two. The main shaft has been sunk 165 feet on a lode of 14 feet in width.

Forty tons of ore from the Celorodo have been received as specimens of the yield of that district.

In Butte county several good lodes are being opened and in Yuba we hear that prospectors are sanguine of success.

NOTICE.—In this State, we believe, cases of deaf and dumb are not very common, although cases of deafness alone are so. We personally know many of the latter, where no relief has been obtained under our most skillful physicians. We have, therefore, much pleasure in calling attention to the authenticated cases of cure by Dr. De Castro, which appear in our advertising columns to-day. Those visiting the Dr. will find him a perfect gentleman in every respect, free from all quackery, and worthy of all confidence.

THE Lake Superior Miner states that \$100,000 of silver is obtained annually from the copper mines.

For the information of those of our subscribers who are members of any of the Temperance Divisions of this city, we are requested to state that the next regular meeting of the GOLDEN GATE Division, will be held on Saturday Evening the 8th inst., instead of Thursday Evening. A full attendance is requested. Their "paper," the "Golden Gate Journal," will be read at 9 o'clock.

THE NAUTICAL MAGAZINE.—Capt. John is out again with his valuable Magazine. Capt. John has a keen eye to everything that pertains to the Sea, and is as firm as a rock on the old flag.

## REPORT OF BIDS

At the San Francisco Mining Stock Board,  
For the week ending Aug. 1, 1883.

Names of Companies.	Total No. Shares	Share per ft	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHINGTON STOCKS.</b>									
Union	16,800	12	\$300	2000	1900	2100	2100	2215	2320
Gould & Curry	4,500	4	800	6400	6000	—	—	5300	5775
Central	1,800	12	200	—	—	—	—	—	—
Chlorus	3,600	14	300	—	—	—	—	—	—
Chlorus	5,000	4	100	1060	1100	1100	1100	1160	1200
Potosi	2,800	2	500	700	700	700	—	—	—
Hale & Norcross	800	1	100	2100	2250	2300	—	—	—
Sierra Nevada	2,800	1	400	61	65	68	71½	71½	71½
Burning Moscow	5,000	4	500	255	210	210	185	175	187
North Potosi	2,200	1	300	46	—	40	43	45	45
Rogers, F. D.	3,400	1	250	—	—	—	—	—	—
Meredith	7,200	1	125	40	50	50½	47½	45	40
Charles Cauey	1,800	1	30	70	—	47½	51	53	60
Sacramento	1,800	1	500	80	—	81	90	85	80
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	3100	3000	—	3300	3375	3400	—
Iowa	100	1	97½	97½	100	—	—	—	—
El Dorado	1	1	78	75	67	65	65	60	—
Norton	1,000	1	6	5	11½	8	6	—	—
La Crosse	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	12	12½	11	11½	11	—
Adriatic	—	—	—	3	—	—	—	8	—
Brennus	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel	10,000	1	100	2½	3	2½	8	3	3
Mount Davidson	30,000	1	200	8¼	—	8¼	8¼	8¼	8¼
Pride of the West	—	—	—	95	96½	94	90	85	95
C. H. Quartz M. Co.	—	—	—	—	—	—	—	25½	—
Imperial	—	—	—	—	450	—	—	477½	465
<b>EMERALDA STOCKS.</b>									
Wide West	2,600	1	600	145	148	165	165	166	172
Antelope	1,200	1	500	—	—	—	—	—	—
Esmeralda	1,800	1	1000	—	—	—	20	20	20
Real del Monte	4,400	1	400	175	—	—	150	140	200
Yuba	1,200	1	100	—	—	—	—	—	—
Comb	1,800	1	250	78	65	73	70	60	55
Silver Hill	3,000	1	500	25	—	—	30	—	—
Nevada	1,200	1	250	—	—	17½	18	—	20
Federal Hope	—	—	—	—	—	—	400	50c	—
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	—	—	—	—
Falls of Clyde	—	—	—	—	—	3	4	—	5
Sanborn, S. W. ex.	—	—	—	—	—	—	—	—	—
Bambou	600	1	800	—	—	—	—	—	—
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	5	7	—	10	9½	12
Coso	5,600	1	600	—	—	—	—	—	—
Willow Springs	2,700	1	100	4	4	4½	4½	4½	4½
Empire	—	—	—	—	—	—	—	—	—
<b>MARIPOSA STOCKS.</b>									
Mina Prieta	2,200	1	1000	—	—	—	—	—	—
Bios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	45	45	55	10	50	45
Josephine	—	—	—	—	—	—	—	—	—
CALIFORNIA STOCKS.	—	—	—	—	—	—	—	—	—
Laurel Hill	—	—	—	2½	2½	2½	2	—	—
Yuba	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	14	—	—	—	12½	14

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, July 30, 1883.

Bid	Ask'd	Bid	Ask'd
<b>Virginia Mining District.</b>			
Ashtabud	\$ 9	Sierra Nevada	\$ 50
Allen	35	Sacramento	80
Altamont	38	Shamrock	10
Alturas	3	Trux	—
Belvidere	25	U. S. Tunnel	2½
Birdsall	15	Utah	40
Bajazet and Golden Era	42½	Old Virginia	250
Burnside	12	Washington	5
Burning Moscow	110	York	3
Beach-Paxton	130	Zouave	12
Bloomfield	75		
Croesus (Buchanan)	250	<b>Gold Hill District.</b>	
Cedar Hill Tunnel	7	Alpha	500
Cole	8	Baltic	21
Commercial	15	Bullion	70
Consolidated Cedar Hill	2	Belcher	1175
Durango	3	Brauch Mint	7
Empire	3	Calcedonia	40
El Dorado	72½	Copper	35
Fairview	200	Eureka	15
Grass Valley	75	Forecast & Ricard	6
Hazel Green	4½	Gold Hill, Big Ledge	75
Harrison, Virginia Incorpor	10	Golden Gate	5
Harrison San. Fran. Incorpor	3½	Golden Eagle (No. 1)	5
Imperial	30	Hawkeye	20
Iowa	250	Hudson	200
Iroquois	5	Koh-i-noor	80
Jadus	10	Leou	80
Janitara	5	Laboring	12
Keystone	25	Lucerne	27
Kenosha	3	Mary Ann	55
La Crosse	3	North American	42½
Lancer	3	North Ophir	35
Monte Cristo	6	Overman	382½
Meredith	45	Oruental	5
Mt. Davidson	3	Omega	500
Mission	10	Princess	112
Melroe	25	Sinaloa	5
Monarch	100	Swozey	9
Monarch	12	Stephenson-Keloc	25
Nadison	15	Union	35
Mohegan	15	Yellow Jacket	1200
Norton	2	Uncle Sam	2
Oakland	10	Yolo	20
Oriental	2½		
Oscar	8	<b>Devil's Gate District.</b>	
Pride of Washoe	7	Governor N.Y.	15
Puyton	15	Hawley	20
Peermann	150	Monterey	7
Perseverance	25	Pride of the West	145
Rogers	100	Winnemucca	6
Recorder	8	Wide West	60
Santa Rita	15		
Santa Fe	35	<b>Flowerly District.</b>	
Sutro	5	Atwill	—
St. George	10	Adriatic	3
		Lady Bryan	7
		Harrison	5
		Uncle Sam	5



## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of May, 1863.

Aug. 3d, - - - - - Steamer Orizaba.

Aug., 13th, - - - Steamer Golden Age.

Aug. 23d, - - - - - Steamer St. Louis.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.  
For Freight or passage, apply to

A. B. FORBES, Agent.

Corner of Sacramento and Leidesdorff sts.

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.

no16-1f

ZENAS WHEELER.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

D. MORRIS,  
MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

## WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. jc13

## REMOVAL.

OFFICE OF THE PACIFIC METALurgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Sil Vermiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

## SOUTH PARK

## Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO.,  
Office in Shiel's Block, opposite Masonic Temple.

je13

S. F. CLOUSER, Secretary,

## CALIFORNIA TOOL WORKS!

John Weichhart,

Manufacturer of

All Kinds of Edge Tools, Etc.,

Plane Irons

Moulding Irons, Stone Cutter's Tools, etc

No. 22 Fremont street, bet Market and Mission,  
San Francisco, July 14, 1863.

THE  
BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

## ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

## METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

## EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

## EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

## BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1860, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed being cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico.

John D. Winters & Co., Esmeralda,

Crown Point Co., Gold Hill.

Potosi Mining Co., Virginia City,

Tajo Mining Co., Mexico.

Sheba Mining Co., Humboldt.

Lotta Mills Co., Coso.

American & Mexican Co., Mexico.

San Carlos Mining Co., Owen's River,

Union Quartz Co., Aurora,

Triunfo Mining Co., Mexico,

Napa Quartz Co., Aurora,

Petaluma Quartz Co., Gold Hill,

Francis Mellus & Co., Slate Range,

W. R. Churchill & Co., Mexico,

Willow Springs Co., Coso,

Hewes, Howe & Co., Rich Gulch Flat,

F. A. Benjamin & Co., Mexico,

O. J. Parker & Co., Nicaragua,

Gibbons & Clayton, Esmeralda,

Smith & Clouser, S. F. Reduction Works.

Amagoza Mining Co., San Bernardino,

## MANUFACTURED ONLY BY

## GODDARD &amp; CO.,

At the Pacific Iron Works.

SAN FRANCISCO.

os 125 to 136 First street, and 126 to 144

Fremont street.

P. DONAHUE, H. J. BOOTH, C. S. HIGGINS.

UNION  
IRON AND BRASS FOUNDRY.

(The First Established in the State.)

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

HAVING ADDED TO THE SEVERAL Departments all the recently improved Tools, this Establishment is now the most Extensive and Complete of any on the Pacific Coast.

The undersigned are prepared to furnish, at short notice, Locomotive, Marine and Stationary Engines, of every size and description.

## BOILERS.

Locomotive, Flue, Tubular, Upright and Cylinder, furnished with or without engines, complete.  
Machinery and Castings of every description, Saw-mills, Grist Mills, Car Wheels, Derrick Irons, etc.

QUARTZ CRUSHING BATTERIES,  
Embracing a great variety of Stamp, Mortar and Cam Patterns.

AMALGAMATING MACHINERY,  
Varney's Improved Patent Pans and Settlers, Wakely Pans, Amalgamating Tubs, Plaisted's Grinders, Chile Mills, Concentrators, etc., etc.

## MINING PUMPS.

Cornish, Lift and Force Pumps, from four to eight feet stroke, with Pipes, Bob Mountings, and Gearing complete.

## HOISTING DRUMS.

For Shafts or Inclines, with clutch, friction or V cones. Sole Agents and Manufacturers for the Pacific Coast, of C. and G. M. Woodward's Celebrated Patent Safety Steam Pumps and Fire Engines.

All Contracts and Orders executed with promptness and dispatch, and at reduced prices for Cash.

jc21 DONAHUE, BOOTH, & CO.

## Giffards Injectors,

FOR SUPPLYING BOILERS WITH FEED WATER without Pumps No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODART, Agent.

jc22 Cor. Pine and Front Sts., San Francisco.

I. C. E. KLEPZIG & CO.,  
GUN MAKERS,  
...AND...  
DEALERS IN GUN MATERIALS,

733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.

Gilding, and also Silver Plating, by E. Eklaud. jc21

CORNELL'S  
EXCELSIOR GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the undersigned is now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

## CARD PICTURES.

As I have every facility for producing these beautiful pictures, in all their different varieties, I have reduced the price to

\$3 PER DOZEN and \$2 PER HALF DOZEN!

Large size Photographs. \$3—Extra copies \$1 each

AMBEROTYPES in all Styles and Prices.

OLD PICTURES copied with care and accuracy, in any style desired, Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist.

jc22 R. H. CORNELL.

## BAUNCHEIDTISM,

THE PRESERVER AND PRODUCER OF LIFE.

THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF curing disease, is a "fait accompli" in medicine, and needs no more proof. The public has crowned Bauncheidtism already with an extraordinary patronage, and it is acknowledged by all men of science that BAUNCHEIDTISM is founded on a rational, scientific basis.

It can safely, and with sure success be applied to paralysis in consequence of Apoplexy, Palsy and Rheumatism of every description, which kind of complaints can find their only relief by the above method.

Especially can it be applied successfully, in the spring of the year to diseases of the eye.  
Dr. Borchers is the only doctor in California who has the original series of Dr. BAUNCHEIDT and his original oil. Dr. Borchers is also in possession of original letters of the inventor of the method by which he can prove that he is perfect master of the latter.

DR. J. C. BORCHERS.

No. 19 Kearney street, and No. 4, Mark's Place, First story, No. 5. Office hours from 9 to 11 A. M., and 1 to 4, and 7 to 9 P. M. jc21

## REYNOLDS' Patent Cut-Off and Governor FOR STEAM ENGINES.

127 of these Invaluable Machines, ARE NOW IN USE In California and Nevada Territory, giving a perfect regular motion and Saving 20 to 65 per cent of the Fuel.

## Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to set and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Works, and at the Stone Breaker, foot of Market Street, San Francisco.

## Clark's Steam and Fire Regulator

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of steam in the boiler. It will regulate the pressure of steam, on the square inch. It cannot get out of order and any person can put one up in an hour after the design is put in.

## Ingersoll's Patent Drill Press,

With which drilling can be done the same as with common ratchet, and when small holes are wanted can be done four times as fast. The handle can be used in any direction.

## Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.

## Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

## Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years. Refer to—Sugar Refinery, San Francisco,

Cottell & Co., San Jose,  
L. A. Booth Esq., Virginia City,  
and 2,000 others in the United States.

E. T. STEEN AGENT

No. 33 Fremont Street, San Francisco

## The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF

COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,

LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such lands are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL.

jc14f Montgomery Street, San Francisco

## To Mining Companies about to incorporate.

JOHN ARMSTRONG,

CONVEYANCER,

610 Merchant Street,

San Francisco

Is Prepared to draw with Accuracy and Dispatch

Certificates of Incorporation—Trust Deeds

and all other Papers,

necessary to the correct Incorporation of Mining

companies, on reasonable terms.

All letters of enquiry cheerfully and promptly

were. Address as above.

## New Style of Ladies' Buckle

W. BOHM,

INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This possesses several very important improvements over other in use.

The invention having been carefully examined by Patent Office, has been adjudged to be a useful invention, and Letters Patent have been granted for 17 years. It excels all other buckles in

Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of

BRAYMAN & LEVY

621 Washington Street, San Francisco

JOSEPH, BROTHIE

607 Montgomery Street, San Francisco

FLORES & CONRY

118 I Street, Sacramento

Agents for the Patent

Every Buckle sold, stamped "W. Bohm,"

guaranteed as to its Strength and Durability.

jc27 W. BOHM, Patentee.

WILLIAM BRODIE & CO.,  
CALIFORNIA FOUNDRY,

Fremont Street, near Market, San Francisco

## Light and Heavy Castings

Of Every Description, Made to Order. Particular attention paid to all kinds of House Work, Plain or Ornamental.



## DESKS

AND

Office Furniture,

OF ALL KINDS.....FOR SALE BY

JOHN WIGMORE,

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBING, of all kinds, attended to.

PALMER, HANSCOM &amp; CO.,

GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

urnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB &amp; CO.

To Quartz Miners.

Know's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of process now known.

by it steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the melting of floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and to be used against making, buying, using or selling the same without his consent. W. A. PALMER.

T. C. Sanborn &amp; Co.,

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

PHIR SILVER MINING STOCK,

GOULD &amp; CURRY MINING STOCK,

CHOLLAR MINING STOCK,

CALIFORNIA STEAM NAVIGATION CO'S STOCK,

BOUGHT &amp; SOLD.

## DEETKEN'S

Chemical and Metallurgical Works,

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

OLD BEARING SULPHURETS WORKED AT REASONABLE RATES. ALL THE GOLD EXTRACTED BY CHEMICAL PROCESS. Yield of Sulphurets from 30 to 50 per cent higher than the BEST AMALGAMATION PROCESS.

Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by owners. No power nor clean water required for purpose. nov-8-3m

LEWIS COFFEY AND RISDON,

TEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing Old Work, executed as ordered, and warranted as quality.

d Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

THEODOR KALLENBERG

Maker of Models  
FOR INVENTORS.MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Lamps, Dies and the Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.  
No. 4 Sansome street, corner Market,  
(3m) San Francisco.

R. W. FISHBOURNE,

PRACTICAL LITHOGRAPHER,

ENGRAVER AND PRINTER,

No. 529 CLAY ST., CORNER OF LEIDSDORFF, San Francisco. State and County Bonds, Stock Certificates, Bills of Exchange, Bills of Lading, Bank Checks, Passes, etc., Architectural and Marine Views, Show Cards, Labels, Etc., executed with neatness and dispatch. N. B. All orders in Crayon Work promptly attended to.

## MINING.

N. B. Mining Stock Certificates executed with promptness and dispatch, and at greatly reduced rates. jy6

MARTIN &amp; Co.,

OFFICE--224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

Purchase of Copper Ores,

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN,

New York.

J. F. GREENMAN,

San Francisco.

San Francisco Post Office, Box 1:59.

je 1.

Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles, WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate--by the day, meal or week. WE SOLICIT A CALL FROM ALL. F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE. F. E. WEYGANT.

LEANDER RANSOM,

Civil Engineer

AND

SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms--Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct 3m



DR. H. AUSTIN,

DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

To Mining Companies.

FOR SALE--A STEAM ENGINE AND BOILER. THE Engine is 30 horse power--10 inch cylinder--24 inch stroke--solid iron frame, with heater, pumps, etc., all complete. The boiler has 5 flues, is 24 feet long, 40 inches in diameter, made up from the best three-eighths inch Low Moor Iron, and weighs about 5000 pounds.

Both Engine and Boiler are in perfect order and fully guaranteed. Apply to, I. H. HAM, [No. 211 Clay st. San Francisco, June 13, 1883. 3t

International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

FIRE-PROOF BRICK BUILDING.

Most convenient to the

Steamer's Landing, Business and Places of Amusement

OPEN ALL NIGHT.

City Railroad Cars Pass the Door.

REDUCTION IN PRICES.

Fine Bathing Rooms attached to the Barber Shop.

Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring bed and Hair mattresses. The International offers to guests the greatest number and

BEST FURNISHED FAMILY ROOMS;

and SIX AS GOOD A TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

John R. Sims,



Oregon street, between Washington and Davis and Front and Jackson streets, SAN FRANCISCO.

Manufacturers of Fire Proof Doors and Shutters, Bank Vaults, Grating, Cemetery Buildings. All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

Mr. Sims Appreciates the Past

liberal patronage of his friends, and trusts that he may continue to merit it in the future.

For the Information of Strangers

he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attests. A large assortment of second hand shutters for sale at low rates. ap13

NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

FULTON FOUNDRY &amp; IRON WORKS

HINCKLEY &amp; CO.,

MANUFACTURERS OF

Steam Engines,

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,

FIRST STREET,

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*.\* All kinds of IRON and BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.

PATTERN MAKING in all its various forms. Prices low.

D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

W. T. &amp; J. GARRATT,

City Brass and Bell Founders

Cor. First &amp; Market sts., San Francisco.

BABBET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &amp;c., COUPLING JOINTS OF ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."

SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1882.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1882

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

San Francisco Machine

.....AND.....

IRON WORKS!

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON reasonable terms.

Steam Engines, High and Low Pressure; Quartz mills, Saw mills, Mining Pumps, Hoisting machines for mining purposes, Wine Presses, Agricultural implements etc., etc., and Castings of all descriptions made to order. Steam Engines exchanged and for sale by

DEYOR, DINSMORE &amp; CO.

REPAIRING promptly attended to.

FOR SALE.

One Upright Post Drill, Putnam's manufacture, Also one thirty inch screw Chuck.  
San Francisco, July, 1883. je13

50 lbs. MARINE and

Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE--Mix three parts Mineral Paint with one part white lead, thin with Linseed oil; if a lighter color is wanted, mix less paint, more lead.

ROOF--Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUE, Superintendent.  
WORKS, North Beach; Office, 509 Sacramento st., San Francisco.

## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco, for the manufacture of every description of PICKS, of the best material, at reduced prices. PICK EYES of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.--None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

## WANTED,

GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,

By FRONTIER A. DEVERCY,

13 ap 487 Pine street, San Francisco.

FREDERICK MANSELL,

MECHANICAL &amp; ARCHITECTURAL

DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

HAYNES &amp; LAWTON,

IMPORTERS AND DEALERS IN

CROCKERY,

GLASS WARE,

FRENCH CHINA,

Coal Oil Lamps, Table Cutlery

CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCHANT.]

SAN FRANCISCO.



**IMPORTANT!**

To Mining Companies, Miners,  
Prospecting Parties, Commanders  
of Ships, &c., &c., &c.

**THE UNDERSIGNED HAS RECEIVED**  
a new supply of the celebrated

**DESICATED AND COMPRESSED  
VEGETABLES,**

Of Messrs. CHOLLET & CO., PARIS, which he offers now  
for sale in lots to suit.  
These Vegetables being perfectly fresh and sweet, are  
the best preventive of scurvy and other diseases result-  
ing from the continued use of salt provisions.

They are already cleaned and prepared for cooking;  
are perfectly preserved, and offer great advantages for  
transportation. 25,000 rations being packed in the space  
of one square yard, while 2,000 rations—or equal to 1,000  
lbs fresh vegetables—weigh only from 100 to 125 pounds.

**CHARLES MEINECKE.**

aug 3 No. 215 Front street,

**Offices To Let,**

In the Government House, Corner of  
Washington and Sanson Streets. Two large units of  
Offices, the most commodious and accessible in the city.  
C. A. CLANE, Proprietor

**Eye, Ear and Throat.**

**DR. DE CASTRO,**  
Oculist and Aurist,

**WHO HAS PRACTISED IN NEW**  
York and all the principal cities of Europe with  
such unrivalled success, and from each place is in posses-  
sion of the most eminent testimonials, may now be con-  
sulted upon diseases of these delicate organs, with a view  
to their permanent cure. Drafts of long standing thor-  
oughly cured. The Doctor employs his (by the Medical  
Society of London approved)

**Self-adjusting Artificial Tympanum,**

For the relief of deafness, attended by loss or injury of  
the membrana tympani, and for the cure of discharge  
from the ear—the invention of Dr. Castro, M. D., author  
of "Deafness Practically Illustrated as to its Nature and  
Treatment," etc.

The self-adjusting Artificial Tympanum was first intro-  
duced to the notice of the profession at the meeting of the  
Medical Society of London, on the 20th of November,  
1863. An animated discussion ensued on the reading of the  
paper, and several members of the Society bore testi-  
mony to the success of the remedy and the importance of  
the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-  
Adjusting Artificial Tympanum, as he had observed the  
immense benefit a young lady friend of his had received  
from it. She was in fact, quite deaf, and in a most mis-  
erable state; the effect of the tympanum was instan-  
taneous—quite like a miracle. Five more testimonials from  
Members of the Medical College, New York, and the prin-  
cipal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and  
Kearny streets. Entrance on Market street.

**Mr. Editor—Having been afflicted**  
with deafness for the last two years, originating from a  
severe cold, and for the last month suffering from the  
most excruciating pains in my ear, I was obliged to come  
down to San Francisco to seek relief. After a physician's  
recommendation to wait on Dr. De Castro, on the corner of  
Kearny and Market streets, and underwent one operation,  
and it is with the utmost pleasure I can say my hearing  
was suddenly and without pain entirely restored. I deem  
it my duty to make this known to the public, and to recom-  
mend Dr. De Castro's skill as an aurist.

JOHN REESE, Napa Valley.  
James Callaghan, witness.  
San Francisco, July 30th, 1863.

[From the Daily Alta.]

San Francisco, June 30th., 1863.

**Dr. De Castro's**

Permit me through your widely circulated journal, to  
say, that my daughter Mary Ellen, has been afflicted with  
deafness since she was thirteen months old, and that she  
has been a member of the Deaf and Dumb Institute since  
it was organized. On taking her to Dr. De Castro, on the  
corner of Kearny and Market Streets, and undergoing un-  
der his direction, two operations, she has heard sounds  
very distinctly; and is now, I am happy to state in a fair  
way to get permanent relief. The result, thus far, is sat-  
isfactory; and I deem this notice due to Dr. De Castro, for  
his skill; and would recommend all parties similarly af-  
flicted to give him a trial. My daughter has at different  
times been under the care of the most skillful physicians  
and aurists in California, but up to the period of visiting  
Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT,  
812 Green Street.

**MINING CERTIFICATE LOST!**

Certificate for Ten Shares, No. 33, dated July  
8th., 1863, of Tamalpais Gold and Silver Mining Company.  
The finder will be suitably rewarded by leaving it at  
room 24, Government Block.

LOUIS EDWARDS.

**CHARLES GEDDES,**

**ARCHITECT,**  
Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms.  
je 20 San Francisco.

**H. C. KIBBE,**

**MINING SECRETARY,**

Commissioner for Nevada Territory,  
542 Sacramento st., cor. Montgomery  
(ARMORY HALL.)

**EXCELSIOR IRON WORKS,**

712 Sansome street,  
Between Sackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,**

Manufacturers of all kinds of

Architectural and Ornamental Iron Work,  
Bank and Store Vaults, Safes, Doors, Shutters, Bal-  
cony, Area and Cemetery Railings, Gates, Stairs,  
Etc. and all kinds of Blacksmithing and Job-  
bing done with promptness, and at

Reasonable Prices.  
Orders from the country promptly attended to.  
je13

**APARTMENTS.**

FURNISHED APARTMENTS, WITH, OR WITHOUT  
Board, at 1013 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
home will do well to apply  
je16

**E. C. DAKE,**

DEALER IN

**CLOTHING,**

AND

Gentlemen's Furnishing Goods;

ALSO

HATS, CAPS, ETC.

At THE NEW YORK CLOTHING STORE,

541 & 543 Washington st. Montg'my Bk  
je1 Old No. 145. [29]

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY

**PEASE, BOWLEY & CO.,**

Real Estate, Stock and Exchange  
**BROKERS,**

621 Montgomery street, San Francisco.

LEGAL TENDER NOTES AND MINING STOCKS,

BOUGHT & SOLD.

je-29

**PUMPS!**

**HARRISON'S**

California Lift and Force Pump,

WITHOUT VALVES OR PACKING.

Suitable for Mines, Fire Engines, Wrecking or Irrigat-  
ing. This is the Cheapest, Lightest and most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

**ALL SIZES;**

Capable of throwing from ONE HUNDRED to FIVE  
THOUSAND Gallons per Minute—For sale by

**C. H. HARRISON,**

PHOENIX OIL WORKS,

je-15 517 Front Street, San Francisco.

**New Bedford Copper Company.**

THE UNDERSIGNED HAVING BEEN APPOINTED  
Agents for the above Company, are receiving regu-  
lar supplies of their superior manufactures of

SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market  
rate, and on the most favorable terms.

je-29 MOHGAN, STONE & CO  
108 Front Street, San Francisco.

**Napoleon Copper Mining Company.**

Capital Stock.....\$1,620,000.  
2,700 Shares—\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Geopier  
District, Calaveras county; Incorporated  
October 3, 1862.

President.....F. MACFELLISH  
Secretary.....Q. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....RICHARD POWNING  
TRUSTEES.

F. MACFELLISH, of Alta California  
M. ERLINGBACH, of Greenberg, Erlingbach & Co.  
A. J. MOULDER, of A. J. Moulder & Co.  
B. G. BROWN, of Geopier & Baker S. M. Co.,  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U.S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je29

**San Antonio Gold and Silver Mines,**  
LOWER CALIFORNIA,

**FORWARDING & MINING AGENCY.**

**SAMUEL SMITH,**

OFFICE—North West Corner of Front and Clay  
Streets, San Francisco.

MINING MACHINERY AND MERCHANDISE FOR-  
warded. Mining Claims secured, through the  
resident Agent at San Antonio, and information fur-  
nished regarding any claim, in that Territory, on Com-  
mission. je-26

**FOR SALE.**

**PATENT PRESSED RUSSIA IRON MINING PANS.**

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Rubb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Bars; Iron Rivets; Etc.

We are also manufacturers of the

**UNEQUALLED  
MONITOR COOKING STOVE  
OR RANGE,**  
FOR HOTELS.

To which we call particular attention.

je-29 TAY, BROOKS & BACKUS.

**MOYNIHAN & AITKEN,**

Boiler Makers and Blacksmiths,

Mission, between Beal & Fremont Sts,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work exe-  
cuted at the shortest notice, and on the most reasonable  
terms. je 29

**L. F. LELAND,**

**STOCK BROKER,**

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

**MYERS & DAGGETT'S**

Mining and Stock Exchange,

No. 23½ B Street, Virginia City, N. T.

Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every descrip-  
tion promptly and confidentially attended to.

\* Abstracts of Titles Furnished, Etc.

**AGENCY**

For the Purchase and Sale of

**MEXICAN MINING STOCKS**

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PEÑA AND LA MARRONENA Sil-  
ver Mining Companies, San Antonio District, Lower  
California.

All persons are invited to call and examine Ores from  
the above mines.  
je13 Wm. FAULKNER.

**ASSAYS!**

Promptness and Accuracy Secure

By THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Club  
and Mining Companies.

**J. H. CHURCHILL, M. A.,**  
(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco.

**A. C. MORSE,**

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENT**  
with MINER S. MARTIN Esq., one of the principal  
Stock Brokers of San Francisco, I am prepared to Bl  
and "ELL" every description of Mining Stocks in Em  
ralda District

**Miners' Foundry**

—AND—

**MACHINE WORKS**

First St., between Howard & Folsom

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MAC-  
inery, the Best and Most Economical, manufactured  
in the state of California, will be furnished with  
patch at the Miners' Foundry and Machine Works, as

Steam Engines and Boilers, Flour, Saw and Quo-  
mill machinery, Mining Pumps, Amalgamators, Rotors  
Etc., Etc., Etc.

Particular attention will be given to the manufac-  
ture of Machinery in Sections, designed for places of diffi-  
culty access. Various models of Quartz Crushers, Amalgam-  
ators and Water Wheels—some in operation and on ex-  
hibition.

\* Parties desiring to test their ore practically, in  
small quantities will be afforded ample facilities, free  
cost.

All parties desiring accurate and highly finished de-  
signs and Superior Machinery, at most reasonable rates,  
are cordially invited to call before contracting elsewhere.

HOWLAND, ANGEL & KING,

San Francisco, February 23, 1863.

**New Patent Agency**

**WE HAVE CONNECTED WITH THE**  
Publication of the "MINING AND SCIENTIFIC PRESS"

**The Patent Agency Business,**

And would invite Inventors and Discoverers on the  
Pacific coast, who wish Dispatch as well as Economy to  
upon us. We have an Experienced Agent at Wash-  
ton, which, together with our own experience of sev-  
eral years, renders the

**Mining and Scientific Press Agency**  
The most desirable place to make application for Let-  
Patent on the Pacific coast. Apply at  
Office of the "Mining and Scientific Press," No.  
27, Federal Building, corner of Battery and Wa-  
shington streets, (directly opposite the Post Office).  
Francisco. EWER & SMITH

**FOREIGN PATENTS OBTAINED**

By application at this office, Room 27, Federal Build-  
ing. EWER & SMITH, Solicitors

**NOTICE TO INVENTORS.**

Inventors wishing to file Caveats should apply at the  
office, Room No. 27, Federal Building. Terms mod-  
erate. EWER & SMITH

**PATENT RIGHTS.**

**Patent Rights Bought and Sold.**  
At the office of the "Mining and Scientific Press," Ag-  
ency. EWER & SMITH

**IMPORTANT TO INVENTORS.**

Inventors who obtain their Patents through this  
Agency can have their inventions illustrated and described  
in the columns of the paper FREE of charge, they may  
furnishing the engravings. We are also prepared to  
publish engravings at reasonable rates. Those who do  
care to go to the expense of having engravings pre-  
pared can have their inventions fully noticed and describ-  
ed in our columns, free of charge. The free use of our  
columns to aid them in introducing their inventions to the  
public will be found a most important advantage. EWER & SMITH





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, AUGUST 10, 1863. NO. 41.

## LIST OF INCORPORATED MINING COMPANIES,

GIVING THE NAMES OF THE COMPANIES, NAMES OF SECRETARIES, LOCALITIES OF MINES AND OFFICES.

- amo, Gold and Silver, Silver City, J F Pope, 115 California street.  
 elope, Silver, Esmeralda District, S Patte, 522 Montgomery street.  
 umbra Mining Co., Devil's Gate District, J O Stranch, 815 Sansome street.  
 na, Gold and Silver, Esmeralda District, Wm Winchester, Aurora, Mono Co.  
 nie Laurie, gold and silver, Humboldt District, J H Gager, Merchant, cor. Mont'g'y.  
 riatric, gold and silver, Flowery District, S B Rooney, 8 Government House.  
 many, gold and silver, Slate Range District, A H Clark, 522 Montgomery street.  
 erican, gold and silver, Virginia District, R L Taylor, 48 Metropolitan Block.  
 ade, Esmeralda District, P B Oppenheim, Aurora, Mono Co.  
 en, Virginia District, R Rising, Virginia City.  
 many East, gold and silver, Slate Range District, W H Clark, 224 Montgomery street.  
 ion, gold and silver, Slate Range District, W H Clark, 224 Montgomery street.  
 mania, silver, San Antonio. L. C., L Landsberger, 519 Montgomery street.  
 elope Spur, silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
 agosa, silver, Salt Spring District, J A Rawsom, Athenæum Building.  
 gusta, silver, Calaveras Co.,  
 stin, silver, Esmeralda District, R O Sturtevant, 428 Montgomery street.  
 apolitan Con, silver, Esmeralda District, C E Buckingham, 607 Clay street.  
 erican Pioneer, silver, La Paz, New Mexico, G W Blake, 224 Montgomery street.  
 aland, silver, Virginia District, Thos. Brownjohn, 621 Clay street.  
 n, silver, Silver City, L D Ingoldsbey, 80 Merchant street.  
 ioch, copper.  
 tic, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
 atraz, silver, Reese River District, A S Gould, 528 Clay street.  
 le Fa in Mining Co.  
 al, gold and silver.  
 alsonia Mining Co. S T Polk, 56 Lyceum Building.  
 a Smith Mining Co. R T Polk, 67 Lyceum Building.  
 erican Freeman, gold and silver, Thos. Hill, Pioneer Building.  
 ans Calientes, gold and silver.  
 erican, gold and silver, Star District, W H Martin, 617 Clay street.  
 azon Tunnel Co.  
 erican, gold and silver.  
 onia, silver and copper, La Paz, Thos. Brownjohn, 621 Clay street.  
 r, gold and silver, Gold Hill, E C Lovell, 436 Jackson street.  
 otic, gold and silver, Pacific Ledge, L F Yates, Virginia City.  
 n, gold and silver.  
 ontoro Mining Co.  
 t, gold and silver, Coso District, V B Post, Lucas & Turner's Building.  
 a, gold and silver  
 Baltimore, gold and silver, J Crocker, 413 Montgomery street.  
 t, gold and silver, Esmeralda District, L D Ingoldsbey, 80 Merchant street.  
 nti, gold and silver,  
 eraz, gold and silver,  
 t, gold and silver, Mogul Mining District, M. L. McDonald, 34 Metropolitan Block.  
 ope Con. Ex. M. Co. Del Norte county,  
 a, gold and silver, Prairie District, El Do. Co., D F Verdenal, 636 Clay street.  
 o, gold and silver, Contra Costa County.  
 ity West, gold and silver, Slate Range.  
 ada Coal Mining Co., Alameda County, L Franconi, Lucas & Turner's Building.  
 n, gold and silver, Esmeralda District, I N Choynsky, Esmeralda.  
 n, gold and silver, Flowry District, T Brownjohn, 621 Clay street.  
 erican Eagle, gold and silver, Excelsior District, Wm E Garry, 619 Merchant street.  
 tic, gold and silver, Monitor District, T J Owens, 1 Armory Hall.  
 e, gold and silver, Echo Dist. Humboldt Co., Ferdinand Vassault, 4 Barron Building.  
 a Silver Mining co. Henry Van Pelt, 436 Montgomery street.  
 us, silver, Durango district, Thomas Hill, Pioneer Building, Montgomery street.  
 e, gold and silver, Silver City, F S Carter, 415 Sansome street.  
 g Moscow, silver, Virginia District, J P Nourse, cor. Mont'g'y and Jackson streets.  
 nia, g & s, Devil's Gate District, R N Van Brunt, 706 Montgomery street.  
 it, g & s, Devil's Gate district, J H Purkitt, 40 Metropolitan Building.  
 Bullion, gold and silver, Russ District, David Wilder, 522 Montgomery street.  
 Bright Star, gold and silver, Esmeralda District.  
 Bullion, gold and silver, Van Horn District, T L Bibbins, 305 Montgomery street.  
 Butte, gold and silver, Sierra County.  
 Bella Vi ta, gold and silver, Lower California, S S Sprague, cor. Cal. and Sansome.  
 Burnside, silver, Virginia District, E C Lovell, 436 Jackson street.  
 Banner, gold and silver, Esmeralda District, R N Van Brunt, 706 Montgomery street.  
 Baltic, gold and silver, Gold Hill District, W W Coryell, Virginia City.  
 Best & Belcher, gold and silver, Virginia District, H E Woodruff, Gold Hill.  
 Buffalo, gold and silver, Green Horn District.  
 Bodi- Bluff C. T. & M. Co., Bodie Mining Dis. Cal., J F Sterling, 33 Montgomery Block.  
 Brennus, gold and silver, Virginia District, D F Verdenal, 636 Clay street.  
 Bajazette & G. Era, gold and silver, Virginia District, R D Fergusson, Virginia City.  
 Bamboo, gold and silver, Esmeralda District, W B Minturn, McAllister Building.  
 Bodie No 2, gold and silver, Bodie District, Cal., A L Chamberlin, 413 Montgomery St.  
 Bravton, gold and silver, Humboldt District, Wm P Denkla, 413 Montgomery street.  
 Big Baby, gold and silver, Esmeralda District, E. Daniels, Express Building.  
 Blue Mountain, g ld and silver, Calaveras Co., Hugo Dreschfeld, 24 Naglee's Building.  
 Bohemia, gold and silver, Mono Co.  
 Baker, gold and silver, Am. District, H. C., J S Luty, 305 Montgomery street.  
 Blue Ridge Mining Co., Slate Range District, G J Turner 606 Montgomery street.  
 Bohemia, gold and silver, Mono Co.,  
 Barker, gold and silver, Am. District, H. C., J S Luty, 305 Montgomery street.  
 Blue Ridge Mining Co., Slate Range District, G J Turner 606 Montgomery street.  
 Buena Ventura, G. and S., Aurora, Mono Co., Wm V Garvey, 612 Merchant street.  
 Best Chance, gold and silver, Echo Dist., Nevada T., Geo. E. Phelan, 726 Montgomery St.  
 Brazier, gold and silver, Esmeralda District, T H Templeton, 550 Clay street.  
 Big Chief, gold and silver, Esmeralda District, P B Cornwall 608 Merchant street.  
 Blue Ledge, gold and silver, El Dorado Co., A St E Denver, Coloma.  
 Benson, gold and silver,  
 Burton, gold and silver,  
 Beannington, gold and silver.  
 Buckeye, gold and silver.  
 Brennus, gold and silver, Devil's Gate District, F. W. Gross, 436 Jackson street.  
 Barclay & Smith Mining Co., D F Verdenal, 636 Clay street.  
 Barnard, gold and silver, R T Polk, 56 Lyceum Building.  
 Boston, copper,  
 Black Belt, gold and silver.  
 Brewster, gold and silver, Esmeralda District,  
 Baltimore American, gold and silver, J L Pool, 540 Washington street.  
 Berry Mining Co., Slate Range District, E Barry, 636 Sacramento street.  
 Black Bess, gold and silver.  
 Bay State Tunnel Co.  
 Big Tree, gold and silver, Amador Co., T J Owens, 1 Armory Hall.  
 Big Blue Lead, gold and silver.  
 Baltimore, gold and silver,  
 Braxley, gold and silver, Reese River District, J L Pool, 540 Washington street.  
 Black Rock, gold and silver,  
 Baron Rothschild, gold, silver & copper,  
 Battle Snake, gold and silver,  
 Byrd's Valley, quartz,  
 Baron, gold and silver,  
 Butler, gold and silver, Wm E Moody, 706 Montgomery street.  
 Broadhead, gold and silver, Thomas McCallan, 617 Clay street.  
 Birmingham, gold and silver,  
 Beverly Con'd copper, El Dorado Canon, J P Nourse, Lucas & Turner's Building.  
 Bigler, gold and silver.  
 Big Canon, gold and silver,  
 Belknap Mining Co. F W Gross, 436 Jackson street.  
 Bunker Hill, gold and silver, Santa Clara District, W H Hartin, 617 Clay street.  
 Buena Ventura Min'g Co., Sonora, Mexico,  
 Barry Silver Mining Company, Slate Range District, Edward Barry, 636 Sacramento st.



Blue Ledge Lovell, silver,  
Baltic Con., gold and silver, Smoky Valley, N. T.,  
Barber, gold and silver, Thos. Brownjohn, 621 Clay street.  
Black Mountain, copper,  
Ben Franklin, gold and silver, Humboldt District, Jas Herrick, 606 Montgomery street.  
Buena Vista Mining Co.  
Big Canon, gold and silver, F W Gross, 436 Jackson street.  
Barretos Mining Co. Sinaloa, Mexico, F Vaussalt, 4 Bolton & Barron's Bldg.  
Black Hawk, gold and silver, Silver Hill, Thos. McCallan, 622 Clay street.  
Bonita, silver, F W Gross, 436 Jackson street.  
Blanding, gold and silver, Virginia District, Henry Toomy, 402 Montgomery street.  
Bay Copper, gold and silver, Clayton D. Con. Cos. S F Gilmore, 305 Montgomery street.  
Boston Ravine, gold and silver,  
Blue Comet, gold and silver,  
Bexar Mining Co.  
Rudington, gold and silver, Esmeralda District, J F Sterling, 33 Montgomery Block.  
Blue Ledge, g & s, Kelsey district, I D Iugoldsbey, 89 Merchant street

Central, silver, Virginia District G B McAneny, 712 Montgomery street.  
California, silver, Virginia District, D W Young N E corner Montgomery and Jackson.  
Carson River, gold and silver,  
Cole, silver, Virginia District, W E Wood, 123 California street.  
Cedar Hill Tunnel M Co. C L Farrington, 509 Sacramento street.  
Copper and Silver City, gold and silver, Silver City, E H Platt, Virginia City.  
Chenango Mining Co. W E Dean, 53 Montgomery Block.  
Con. Silver Hill, gold and silver, Esmeralda District, S Pattee, 522 Montgomery street.  
Crown Point, gold and silver, Gold Hill District, J H Jones, 321 Front street.  
Chas Cany Mining Co. Devil's Gate District, Gomer Evans, 338 Montgomery street.  
Combination, gold and silver, Telescope District, David Wilder, 522 Montgomery street  
Consumes Mining Co. Sacramento Co. ——— Daylor's Ranch.  
Carbon Hill, Mining Co. Virginia District, ——— Aurora, Mono Co.  
Cape, silver, Esmeralda District, H S Sanders Aurora, Mono Co.  
Crescent, gold and silver, Van Horn Dis. J S Luty, 305 Montgomery street.  
Corcoran, gold and silver Esmeralda District, J Woodthorpe, 326 Clay street.  
Carrie Bell, gold and silver, Esmeralda District, W L Duncan, Pioneer Hall.  
Cedar, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
Cook, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
Cochecho Mining Co. Humboldt District, N B Mulville, 606 Montgomery street.  
Caledonia, gold and silver, Gold Hill District, W B Agard, 412 Front street.  
Chrysopolis, gold and silver, Virginia District, H Toomey, cor. Montg. and California.  
Colorado gold and silver, La Paz, N M. R E Raimond, 515 Front street.  
Cataraugus, gold and silver, Slate Range District, A H Clark, 522 Montgomery street.  
Clear Creek, silver, Washoe & Eagle District, C Stevens, 6 Parrott's Building.  
Chrysopolis, silver, Mono County, J H Gager, Montgomery Block.  
Collins, gold and silver, Esmeralda District,  
Concert, gold and silver, Esmeralda District, Thomas Brownjohn, 621 Clay street.  
Cayuga Mining Co. Slate Range District, G J Turner, 606 Montgomery street.  
Cresus, gold and silver, Eagle & Washoe district, J P Nourse, Lucas & Turner's Building.  
Christiana, gold and silver, Esmeralda district, J H Purkitt, Metropolitan Block,  
Chicago, gold and silver, Esmeralda district, J Woodthorp, 326 Clay street.  
Corinthian, gold and silver, Esmeralda district, J H Purkitt, Metropolitan block.  
Colusa, gold and silver, Prince Royal district, M G Elmore, 528 Montgomery street.  
Cedar, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
Clemens, gold and silver, Esmeralda district, C E Buckingham, 607 Clay street.  
Combination, gold and silver, Telescope district David Wilder, 522 Montgomery street.  
Chicago, gold and silver, Silver Mountain district.  
Cassandra, gold and silver, Esmeralda district.  
Comet, gold and silver, Russ district, D Wilder, 522 Montgomery street.  
Congress, gold and silver, Slate Range district, W W Lawton, 400 Montgomery street  
Comstock, gold and silver,  
Camille, gold and silver,  
Coffee, gold and silver,  
Constellation, gold and silver, Humboldt district, V B Post, Lucas & Turner's Building.  
Casket, gold and silver,  
Cleopatra, gold and silver, Wm H Watson, 607 Clay street.  
Carico, silver, Reese River district, A S Gould, 528 Clay street.  
Cassius, gold and silver, Buena Vista district, F R Jenkins, 80 Merchant street.  
Cloud, gold and silver,  
Caledonia Tunnel, M Co. Gold Hill District, S B Rooney, Government House.  
Columbia Mining Co.  
Chilon, gold and silver, T B Robinson, 896 Front street.  
Commonwealth, gold and silver,  
Charles Cany Mining Co.  
Carlton, silver and copper, Weaver District, C T, G J Turner, 606 Montgomery street.  
Celestia, silver and copper, Weaver District, C T, G J Turner, 606 Montgomery street.  
Chimney Rock, gold and s,  
Curtis Mining Co. Reese River District, M R Wallis, 15 Metropolitan Block.  
Converse & Munckton T Co.  
Cortez, gold and silver, minig co, Cor. dis, R N Van Brunt, 606 Mont  
Congress, silver,  
Commerce, silver  
Cosmopolitan, gold and silver, Monitor district, Am Co. T J Owens, 1 Armory Hall.  
Capital, gold and silver, Reese River distr.ct, M L McDonald, 34 Metropolitan Block.  
Caycroft, gold and silver,  
Cresus, gold and silver, Ormsby County, J H Gager, corner Montgomery and Merchant.  
Carson, silver,  
Consolation, gold and silver, A H Griswold, Virginia City.  
Campton, gold and silver,  
Copp,  
Carr Tunnel Co.  
Camp & McNulty M Co.  
Carolina, gold and silver,  
Crown Point Ravine, gold and silver, Mariposa County, J W Gould, 406 Montgomery st.  
Cosette, silver and copper, L Franconi, Lucas & Turner's Building.  
Contra Costa, silver & copper,  
Cayuga, gold, silver and copper, Van Horn District, C W Curtis, 606 Montgomey street.  
Chihuahua Mining Co,  
Comet, gold and silver,  
Constitution, gold and silver, Lander County, N T, J C Ford, 607 Washington street.  
Cresus, gold and silver.  
Cobre Rica Mining Co. Weaver district,

Cambridge, silver, F W Gross, 436 Jackson street.  
Cabezon Mining Co.  
Cre cent, copper,  
Cumberland Consolidated, gold and s iver,  
Cuba, gold and silver, Humboldt district, E Flanagan, 8 Naglee's Building.  
Cresus, silver and copper, El Dorado Canon,  
Capiapo, silver, W P Dewey, corner Clay and Montgomery street.  
Constantia Mining Co. Humboldt district, J H Gager, Montgomery B'ock.  
Copper Hill Mining Co. Soledad district, Los Angeles, E Barry, 636 Sacramento street.  
Crown Lead, gold, silver and copper, Mariposa County, John W Gould, 406 Montg. st.  
Cinco Senores, gold and silver, Sinaloa, Mexico,  
Choyo, gold and silver, Esmeralda district, D S Levy, Esmeralda.  
Cincinnati, silver, Reese River district, P B Cornwall, 608 Merchant street.  
Camanche, gold and silver, Sugar Pine district, A S Gould, 528 Clay street.  
Cash, gold and silver, Palmyra district, A L Chamberlin, 413 Montgomery street.  
Consolacion, silver, Durango, Mexico, M Hawkins, 403 Pine street.  
Codicia Silver Mining Co. Henry Van Felt, 436 Jackson street.  
Carrzalita Silver Mining co. Henry Van Felt, 436 Jackson street.  
Clio, gold and silver, Tuolumne Co. J F Pope, 113 California street.  
Central American, g & s, Gold Hill district, Z I Pool, 539 Washington street.  
Chollar, silver, Virginia District W E Dean, 53 Montgomery Block.  
Coso, silver, Coso District, D W Chambers, 11 Cool Block.  
Chrysal, g & s, Silver mountain district, J L Pool, 540 Washington street.  
Chicago and Detroit Consolidated, g & s, Monitor dis., H Dreschfield, 23 Nagles bld.

Desert Mining Co. Flowery District, D Wilder, 522 Montgomery street.  
Daney, gold and silver, Devil's Gate District, A De Senailhas, Government House.  
Dios Padre, gold and silver, Sonora, Mexico, J T Nesmith, 502 Montgomery street.  
Doyle, gold and silver, Esmeralda district, J Woodthorpe, 326 Clay str et  
De Soto, gold and silver, Star district, R C Page, 428 Montgomery street.  
Danube, gold and silver, Esmeralda district, J H Purkitt, 40 Metropolitan Building.  
Dane, gold and silver, Esmeralda district, J R Beard, 4 Amory Hall.  
Davis Consolidation, gold and silver, Esmeralda dist. C E Buckingham, Aurora, Mono, C  
Dimes No 2, gold and silver, Esmeralda district, J Armstrong, 610 Merchant street.  
Delaware, Virginia district, ——— Purdy.  
Detroit, gold and silver, Humboldt district, V B Post, Lucas & Turner's Building.  
Dayton, gold and silver, W H Watson, 607 Clay street.  
Donophan, gold and silver,  
Deposit, gold and silver, R Clark, 422 Montgomery street.  
Del Monte Cross Consolidation, gold and silver,  
Dell, gold and silver, John Fowler, corner Clay and Battery.  
Del Rey, silver, Devil's Gate District, David Wilder, 522 Montgomery street.  
Danebrog, gold quartz, Yuba County, C L Farrington, 528 Clay street.  
Don Pedro gold and silver, Esmeralda district, J H Purkitt, Metropolitan block.  
Dona Carolina, gold and silver,  
Dashaway, gold and silver, J T Miller, 527 Montgomery street.  
Delta, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street.  
Dixon, gold and silver, Table Mountain district, E Flanagan, 8 Naglee's Building.  
Douglas and Fillmore Con. gold and silver, San Francisco district, W Hollis, 410 Mont.

Esmeralda, silver, Esmeralda district, S Pattee, 522 Montgomery street.  
Esmeralda 1st Extension N M Co. Esmeralda district, S Pattee, 522 Montgomery street.  
Eastern Slope Mill & M Co. Silver City, J J Cushing, 727 Clay street.  
Excelsior Mill & M Co. Silver City, ——— Silver City.  
Early Dawn, gold and silver, Devil's Gate district, J H Brewer, 40 Montgomery street.  
Estrick, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
Emmett, Geo. gold and silver, Esmeralda district, John Woodthorpe, 326 Clay street.  
El Dorado, gold and silver, Virginia district, Henry Toomey, corner Montgomery and C  
Everett, gold and silver, Humboldt district, J H Gager, Montgomery Block.  
Empire, gold and silver, Silver City, B P Ridgway, Metropolitan Hotel.  
Empire, gold and silver, Esmeralda district, C H Wakelee, 612 Merchant street.  
Eltesoro, gold and silver, Lower California, H E Kibbe, 542 Sacramento street.  
Eagle Mining Company, J C Hoyt, N W corner Montgomery and Commercial.  
Emma, gold and silver, Dayton, Lyon Co. ——— Dayton, Lyon Co.  
E-trel-a, Del Monte, gold and silver, Humboldt district, J H Gager, Merchant street.  
Esmeralda, gold and silver, Buena Vista, H Co. J S Luty, 305 Montgomery street.  
East Antelope, gold and silver, Silver Hill district, J H Blood, 7 Montgomery Block.  
Empire Mill and Mining Co. Gold Hill district, G R Spinney, Metropolitan Block.  
Electrical, gold and silver, Esmeralda district, E Worth, 547 Washington street.  
Empire, gold and silver,  
Excelsior, copper,  
Enterprise, copper, Placer County, M G Elmore, 528 Montgomery street.  
Echo, gold and silver,  
El Paso, gold and silver, Esmeralda district, J T Sterling, 33 Montgomery Block.  
Esmeralda Spur, gold and silver, Esmeralda district, C W Curtis, 606 Montgomery str.  
Ethan Allen gold and silver, Reese River district, M L McDonald, 34 Metropolitan Bl.  
Evangeline, gold and silver, Gold Hill district, N E Grimes, 4 and 5 Government Hou.  
Excelsior, gold and silver, El Dorado district, N T J L Pool, 540 Washington street.  
Eastern (front lead) M Co. Virginia district, J S Davis, 18 Montgomery Block.  
Evoca Consolidation, copper, Del Norte district, E Barry, 636 Sacramento street.  
El Tigre a Colorado, gold and silver, Durango, Mexico, C L Farrington, 528 Clay street  
Enterprise, gold and silver, El Dorado Canon, R Clark, Lyceum Building.  
Exchange, copper, Del Norte county, H. S Dalliba, 604 Montgomery street.

Falls of Clyde, gold and silver, Esmeralda district, W L Duncan, Pioneer Hall.  
Flowery Mill Co. Flowery district, James Peck, 707 Sansome street.  
Foundation M and Trust Co. Esmeralda district, A Davidson, Oakland, Alameda Couy.  
Franco-Americana, gold and silver, San Antonio, L C, A S Gould, 528 Clay street.  
Flyaway, gold and silver, Esmeralda district, P B Oppenheimer, Aurora, Mono County  
Federal Union, gold and silver, Esmeralda district,  
Fulton, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
Francis, gold and silver, Slate Range district,  
Federal Union, gold and silver, Esmeralda district, J T Baily, 605 Sacramento street.  
Franklin Tunnel Mining Co. Esmeralda district, P B Cornwall, 608 Merchant street.  
Frankfort, Esmeralda district, Jno M Burnett, 605 Montgomery street.  
Francis 1st S E Extension, gold and silver, Slate Range district, A H Clark, 522 Mont st.  
Filmore, gold and silver, Slate Range district, W W Lawton, 400 Montgomery street.  
Federal Hope Consolidation, gold and silver,  
Fort Pitt, gold and silver,  
Foundry, gold and silver, W W Wiggins, 608 Montgomery street.  
Fort, gold and silver, Blue Mountain district, W H Jessup, 33 Fremont street.  
Fort Point, gold and Silver, J F Miller, 327 Montgomery street.



Flor de San Antonio, gold and silver,  
Foundling, gold and silver, Wm E Moody, 706 Montgomery street.  
Felix, g & s, Devil's Gate District, William Willis, 712 Montgomery street.  
Fanny Road, silver, F W Gross, 436 Jackson st eet.  
Federal Republic, silver, Virginia District, N Shiverick, cor. Montgomery and Clay streets.  
Fellows Quartz Mining Co., L Francconi, Lucas & Turner's building.  
Falstaff Mining Co., J F Bailey, 605 Sacramento street.  
F C Loomis, gold and silver, Gold Hill District, S T Steele, Virginia City.  
Flowery, Flowery District, J G Gilchrist, Virginia City.  
First S. Chihuahua Mining Co., Esmeralda District, W W Lawton, 400 Montgomery St.  
Federal Hop, gold and silver, Esmeralda District, Thos. Brownjohn, 621 Clay street.  
Guadalupe, silver, Chihuahua, Mexico, Wm Blackwood, 742 Washington street.  
Gould & Curry, gold and silver, Viria Dist, J C L Wadsworth, Lucas & Turner's building.  
Good Hope, Nevada Territory, D Davison, 338 Montgomery street.  
Gold Hill Qtz Mill & Mining Company, Gold Hill District, Chas Pioda, 627 Front street.  
Great Central Mining Co., District J W Collins, 326 Clay street.  
Garibaldi, gold and silver, Esmeralda Distr et, H D Bequette, Aurora.  
Gazelle, gold and silver, Esmeralda District, Daniel Clark, Court Block.  
Governor, Devil's Gate District.  
Gold Hill Union Mills, gold and silver, Gold Hill Dist, J F Sterling, 327 Commercial St.  
Great Western Mining Co., Coso Dist., Tulare Co., Barclay Henley, Express Building.  
Gen. Grant, gold and silver, Esmeralda District.  
Gen. Jackson, gold and silver, Esmeralda District, P B Oppenheim, Aurora.  
Golden Age, gold and silver, Humboldt District, A L Chamberlin, 413 Montgomery St.  
Green, gold and silver, Gold Hill Dist.  
Gobernadora, silver, San Antonio, L C.  
Gov. S-y-mour, gold and silver, Reese River district, D B Francis, 228 Front street.  
Gen. Hooker, gold and silver, Virginia district, J H Brewer, 40 Montgomery block.  
Guadalupe de Los Angeles, gold and silver, L A Sanderson, 13 Court block.  
Georgiana, gold and silver, Slate Range District, W W Lawton, 400 Montgomery street.  
Golden Era, silver, F W Gross, 436 Jackson street.  
Gen. Hooker, gold and silver.  
Golden Age and Emp., gold and silver,  
Gen. Hooker East, gold and silver.  
Globe, gold and silver, Wm H Watson, 607 Clay street.  
Grand Turk, gold and silver, Wm H Watson, 607 Clay street.  
Gray Eagle, gold and silver, Wm H Watson, 607 Clay street.  
Golden Gate, silver, J P Nourse, Lucas & Turner's building.  
Gem, gold and silver, E-meralda district, T Flitcroft, 617 Clay street.  
Gildersleeve, gold and silver.  
Good Hope, gold and silver.  
G eat Western Tunnel & Mining Co., Coso district, W W Lawton, 400 Montgomery St.  
Gov Staunford, gold and silver,  
Golden Wedge, silver, J P Nourse, Lucas & Turner's building.  
Gold Hill Quartz Mill & Mining Co., Gold Hill district, Wm V Garvey, 619 Merchant St.  
Gould & Curry No 1 Mining Co.  
Golconda, gold and silver, Reese River District, M L McDonald, 34 Metropolitan block.  
Golden Wedge Mining Co..  
Gorsha Mining Co, Esmeralda district, J H Purkitt, 422 Montgomery street.  
Green Rock Mining Co, Angel's Camp, E A Breed, cor Jackson and Montgomery streets.  
Griffin Tunnel Co,  
Graham, gold and silver.  
Gov. Potter, gold and silver,  
Geraldine, gold and silver.  
Gold Hill, silver.  
Grizzly Hill Consolidated Tunnel Co.  
Galvin Mining Co., Esmeralda district, F. H. Rogers, 607 Washington st.  
Golden Age, gold and silver,  
Golden Era Mining Co, E C Lovell, 436 Jackson street.  
Gold Hill Big Ledge Mining Co., Wm Willis, 712 Montgomery street.  
Green Monster, gold and silver.  
Great Eastern, gold and silver, Virginia District, L F Yates, South C. St., Virginia City.  
Gila, gold and silver.  
Gov. Nyc, gold and silver, Devil's Gate district, Geo. M Blake, 416 Clay street.  
Golden Rule Mining Co., Tuolumne Co, J B Russell, 410 Montgomery street.  
Gem of Nevada, gold and silver, Wm Willis, 712 Montgomery street.  
Granite Rock, gold and silver, Ceder Hill district, T Brownjohn, 621 Clay street.  
Green Rock Tunnel Co., Esmeralda district, L D Ingoldsby, 80 Merchant St.  
Great Basin Mining Co., Humboldt district, J H Blood, 7 Mongomery street.  
Geo. Eunnet, gold and silver, Esmeralda district, J Woodthorp, 426 Clay street.  
Grey Ledge, gold and silver, Murphy's district, M G Elmore, 528 Montgomery street.

Humboldt Mining Co., Galena district, G O'Hara Taaffe, 430 California street.  
Hornet Mining Co., Virginia district, C H Light, Virginia City.  
Hope Mining Co., Gold Hill district, F W Gross, 436 Jackson street.  
Hale & Norcross, silver, Virginia district J F Lightner, Metropolitan block.  
Harrison, gold and silver, Flowery district, Henry Toomey, N E cor Mont. and Cal. St.  
Hazel Green, gold and silver, Virginia district, T Brownjohn, 621 Clay street.  
Heath, gold and silver, Esmeralda district, H D Bequette, Aurora.  
Hawley, gold and silver, Devil's Gate district, C Stevens, 6 Parrott's building.  
Humboldt Mining Co., Galena district, J L Pool, 540 Washington street.  
Hattie, gold and silver, Esmeralda district, J H Purkitt, 40 Metropolitan Block.  
Hope, gold and silver, Prince Royal district, L Francconi, Lucas & Turner's building.  
Hermine, gold and silver, Esmeralda district, C H Wakelee, 612 Merchant street.  
Hayes, gold and silver, Slate Runge district, C H Wakelee, 612 Merchant street.  
Halleck, gold and silver, Great Mogul district, J L Pool, 540 Washington street.  
Humboldt, gold and silver, Russ district, D Wilder, 522 Montgomery street.  
Heckendorn, gold and silver,  
Hebe, gold and silver, Reese River district, Wm V Garvey, 619 Merchant street.  
Hudson Mining Co., Gold Hill district.  
Highland, gold and silver, Humboldt district, Wm A Cornwall, 528 Clay street.  
H Raymond, gold and silver.  
Halias, gold and silver.  
Harrison, gold and silver, Geller Ledge, L F Yates, Virginia City.  
Halsted, gold and silver,  
Herzo Consolidation, gold and silver.  
Hensley, silver and copper, Weaver district, C. T., J G Turner, 606 Montgomery street.  
Holdridge, gold and copper.  
Humboldt Canal Mining Co., Humboldt dist, E A Breed, cor. Jackson and Mont'y Sts.  
Hartford Tunnel and Mining Co.  
Hudson, gold and silver, Devil's Gate District, J L Pool, 540 Washington street.  
Hartford Mining Co., Gold Hill district, J S Davies, 18 Montgomery block.

Hornitas, gold and silver.  
Harris, gold and silver, Esmeralda district, Hugo Dreschfeld, 24 Naglee's building.  
Harmom, gold and silver.  
Higgins' Hope, gold and silver, San Francisco Co., Hugo Dreschfeld, 24 Naglee's building.  
Harker, gold and silver, Reese River district, J A Drinkhouse, 228 Front street.  
Haral, gold and silver, Sinaloa, Mexico, W H Martin, 617 Clay street.

Isaacs, gold and silver, Esmeralda district, Jas. Neary, 326 Clay steert.  
Independence Quartz Co.  
Iowa, mining co. Virginia district, R N Van Brunt, 706 Montgomery street  
Ida, gold and silver, Russ district, David Wilder, 522 Montgomery street.  
Illinois Tunnell and Mining Co., Esmeralda district, M Wallace.  
Indian Queen, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
Insurance Mining Co., Jas Gallagher, 706 Montgomery street.  
Inadianola, gold and silver, Humbolt District, J F Pope, 113 California street.  
Iowa, gold and silver, C V Hobert, 505 Montgomery street.  
Isabel a, gold and silver.  
Ingot, gold and silver.  
Isabella Mining Co.  
Indian Queen, gold, El Dorado Canon.  
Intataba, silver and copper, Weaver District, G J Turner, 606 Montgomery st.  
Indus, gold and silver.  
Indian Chief Lode Mining Co.  
Indian, gold and silver, John C Leconey, Virginia City.  
Indiana, silver  
Independent gold and silver, Argentine District, E E Phillips, Virginia City.  
Ironclad, gold and silver, El Paso District, Edward Barry, 636 Sacramento st.  
Imperial, gold and silver, Gold Hill, C T Hopkins, 405 Front st.  
Irving, gold and silver, Virginia District, M L Winn, 542 Sacramento st.  
Imperatrice Eugenie, gold and silver, Calaveras Co. J Woodthorpe, 326 Clay st.

Jackson, gold and silver, Esmeralda District, ————, Aurora.  
Josephine, gold and silver, Coso District, W W Lawton, 400 Montgomery street.  
Jewel, gold and silver, Devil's Gate District, Cha's Gardner, 610 Washington street.  
Jack Hayes, gold and silver, Esmeralda District, J H Blood, 7 Montgomery block.  
Jefferson, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
Jason Mining Co. Sierra and Nevada Co. L Maubee, 716 Montgomery street.  
Jenny Lind Mining Co. Esmeralda District, P B Cornwall, 608 Merchant street.  
Juniata West Mining Co. P Basche, Silver City.  
Joe Hooker Mining Co.  
Jefferson, gold and silver, Silver City, E N Bashford, Silver City.  
Jejeebboy, gold and silver, Santa Clara District, W Sparrow, 543 Clay street.  
Juniata, gold and silver.  
James River, gold and silver, John Gorman 423 Battery street.  
Josephine, copper, Calaveras Co. T Brownjohn, 621 Clay street.  
Julius, gold and silver, Reese River District, L Francconi, Lucas & Turner's building.  
Juno, gold and silver, Esmeralda district, M G Elmore, 528 Montgomery street.

Kohler Bros. silver, San Antonio, L. C., Kohler Bros. Sansome street.  
Kohler, gold and silver, Esmeralda District, James Neary, 326 Clay street.  
Keokuk, gold and silver, Esmeralda District, C H Wakelee, 612 Merchant street.  
Kate, gold and silver, Prince Royal District, L Francconi, Lucas & Turner's building.  
Key Quartz Lode Mining Co. Slate Range District, L R Love, Custom House.  
King David, gold and silver, Esmeralda District, T Brownjohn, 621 Clay street.  
Kenosh, gold and silver.  
Katy Wakeman Ledge Mining Co. Washoe District.  
Kemp, gold, silver and copper.  
King, gold and silver.  
Keokuk, copper, A B Winegar, 322 Front street  
Keltz, copper, Tuolumne Co. H C Kibbe, 542 Sacramento street.  
Kentucky, gold, silver and copper.  
Kohler Bros. silver.

Lafayette, gold and silver, Gold Hill District, Wm E Moody, 706 Montgomery street.  
Lucerne Mining Co. Gold Hill District, J S Paxson  
Lytton Mining Co. Genoa District.  
Lady Bryan, gold and silver, Flowery District, John T Bailey, 605 Sacramento street.  
Latiobe Tunnel and Mining Co. Virginia District, R N Van Brunt, 706 Montgomery st.  
Live Yankee, gold and silver, Esmeralda District, J A Moultrie, Aurora.  
La Plata Mining Co. Esmeralda District, H S Sanders, Aurora.  
Livingston, gold and silver, Esmeralda District, Jas Neary, 326 Clay street.  
La Amistad, gold and silver, Santiago, L. C., A de Senaillac, cor Montgomery & Jackson.  
Los Cruzecitas Mining Co. Sonora, Mexico, C J Brenham, cor Jackson and Front streets.  
Lily of the West Mining Co. Esmeralda District, T L Bibbins, 305 Montgomery street.  
Laurel Hill Mining Co. Tuolumne Co. Jno B Russell, 410 Montgomery street.  
Lily Dale, gold and silver, Silver Hill, J R Beard, 4 Armory Hall.  
Los Angeles Con. gold and silver, Soledad District, Alfred Dennoe, 104 California street.  
Lloyd, gold and silver, Esmeralda District, Isaac Tabor, 7 Armory Hall.  
Lexington Tunnel Co. Star District, Chas Judd, Sherman's building.  
Loyal, gold and silver, Esmeralda District, W F Hitecock, 7 Mead House.  
Lowman, g-ld and silver, Virginia District, Wm Knight, 414 Front street.  
Lady Franklin, copper, Tuolumne Co. G F Turner, 606 Montgomery street.  
Live Yankee, gold and silver, Slate Range District, W W Lawton, 400 Montgomery street  
Lady Washington, gold and silvea, Slate Range D, W W Lawton, 400 Montgomery street  
La Plata Mining Co.  
Lady Tucker, gold and silver.  
La Blanch, gold and silver.  
Luna, gold and silver, Esmeralda District, T Brownjohn, 621 Clay street.  
Lafayette Mining Co. Ames Gallagher, 706 Merchant street.  
Loyal, gold and silver, Humboldt Co. F Vassault, corner Montgomery and Merchant.  
Lander Co. gold and silver, Reese River District, A S Gould, 528 Clay street.  
Livingston, gold and silver.  
Lady Franklin, gold and silver.  
Louisville, gold and silver, Humboldt District, H C Kibbe, 542 Sacramento street  
Lake Mining Co.  
Lord Byron, gold and silver, Esmeralda District, H B Congdon, 621 Montgomery street.  
Los Posos, gold and silver, La Paz District, T Brownjohn, 621 Clay street.  
Lafayette, gold and silver.  
Louisia, gold and silver, Silver City, J F Pope, 115 California street.  
Lexington Mining Co,  
La Belle France, gold and silver.  
Loomis, gold and silver, Prince Royal District, W Sparrow, 543 Clay sreet.



- La Palma, silver.  
 Lulu, copper and silver, Weaver District, G J Turner, 606 Montgomery street.  
 Long Tom, gold and silver.  
 Lady Adams, silver.  
 Logan, silver.  
 Lady Washington, silver, N Shiverick, cor Montgomery and Clay.  
 Lady Franklin, silver, N Shiverick, cor Montgomery and Clay.  
 Lone Star, silver, Esmeralda District, A Hanke, Aurora.  
 La Mariposa de G'a, gold, silver and copper.  
 La Luz Mining Co.  
 Lady Ann, gold and silver.  
 La Gloria, gold, silver and copper, 476 Jackson street.  
 La Mina de la D Prov, gold and silver.  
 Live Oak, copper, Gopher, Calaveras Co. J H Gager, Merchant street.  
 Lancaster Mill and Mining Co. Humboldt Co. N. T., C Wetzler, 320 Montgomery street.  
 La Blanca Mining Co. Sonora, Mexico, Chas Frieberg, 408 Clay street.  
 Lone Star Mining Co. Reese River, A L Whitney, 602 Washington street.  
 La Esperanza, Arizona, C A Eastman, 726 Montgomery street.  
 La Providencia Silver Mini g Co. Copalo, Sinaloa, Frank W Gross, 436 Jackson street.  
 La Mina del Norte Silver Mining Co. San Antonio, L. C. Henry Van Pelt, 436 Jackson.  
 La M-na Ophi Silver Mining Co. San Antonio, L. C. Henry Van Pelt, 436 Jackson street.  
 Lizzie Leighton, Consolidation; Esmeralda District, J R Beard; 4 Armory Gall.  
 Lady Ellen, g & s, Silver City District, L D Ingold by, 80 Merchant street.  
 Logley, gold and silver, San Francisco district, A. T., S H Corey, 410 Montgomery street.
- Mount Vernon, silver.  
 Mt. Davidson, gold and silver, Virginia district, F A Fabens, 47 Montgomery block.  
 Meredith, gold and silver, Virginia district, E B Holmes, 712 Montgomery street.  
 Mayflower, gold and silver, Esmeralda district, W L Duncan, Pioneer building.  
 Mormon, silver.  
 Mina Prieta, silver, Sonora, Mexico, J P Nourse, Lucas & Turner's building.  
 Manzanillo, silver, Sinaloa, Mexico, — Eddy, 616 Merchant street.  
 Moss, gold and silver, Virginia district, R U Page, 428 Montgomery street.  
 Montezuma Tunnel and Mining Co. Esmeralda district, Aurora.  
 Mt. Braly Summit, gold and silver, Esmeralda district, P B Oppenheim, Aurora.  
 Monroe, gold and silver, Grass Valley.  
 Monarch, gold and silver, Virginia district.  
 Madison, gold and silver, Virginia district, P B Cornwall, 608 Merchant street.  
 Monterey, gold and silver, Devil's Gate district.  
 Melones and Stanislaus, gold, silver and copper, Calaveras, Geo. Congdon, 629 Commercial.  
 Mathews gold and silver, Esmeralda District, E Worth, 547 Washington street.  
 Merchant and Miners, gold and silver, Nevada Territory, M Lichenstein, Virginia City.  
 Maudsora, silver, Sonora, Mexico, F H Waterman, 618 Merchant street.  
 Mohave, gold and silver, Lower California, G S Turner, 606 Montgomery street.  
 Mountain View, gold and silver, Slate Range district, W H Clark, 224 Montgomery street.  
 Morrow East, gold and silver, Slate Range, district, W H Clark, 224 Montgomery street.  
 Milwaukee, gold and silver, Slate Range district, W H Clark, 224 Montgomery street.  
 Montrose, gold and silver, Esmeralda district.  
 Mount Hope, silver, Virginia district, Thomas Brownjohn, 621 Clay street.  
 Mono Tunnel and Mining Company, Esmeralda District, L D Ingoldsbys, 80 Merchant str.  
 Manhattan gold and silver, Humboldt district, J H Gager, Montgomery Block.  
 Mayflower, gold and silver, Star District, J A Drinkhouse, 228 Front street.  
 Mason, gold and silver, Esmeralda district, J A Drinkhouse, 228 Front street.  
 Mammoth Tunnel and Mining Company, Esmeralda distr ct J A Drinkhouse, 228 Front st  
 Marmion, copper, gold & silver, Mariposa district, J T Hoyt, 415 Montgomery street.  
 Madison, gold and silver, Slate Range district, G J Turner, 606 Montgomery street.  
 Madison, gold and silver, Slate Range district, G J Turner, 606 Montgomery street.  
 Miller, gold and silver, Esmeralda district, Isaac Tabor, 7 Armory Hall.  
 Madison, gold and silver, Silver Mountain district.  
 Montezuma, gold and silver, Reese River district.  
 Mammoth No. 1, gold and silver, Esmeralda district, J R Beard, 4 Armory Hall.  
 Magna Charta, gold and silver.  
 Monitor, gold and silver, Slate Range district, John Crowley, 428 Montgomery street.  
 Mammoth, gold and silver, William E. Moody, 706 Montgomery street.  
 Monte Cristo, silver, Virginia district, E B Holmes, 712 Montgomery street.  
 Minehaha Mining Company.  
 Montreal Tunnel and Mining Co., Esmeralda district, J H Blood, 7 Montgomery Block.  
 Moulder, gold and silver.  
 Minona, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Manhattan Mining Co., Edward Franklin, corner of Montgomery and California streets.  
 Monadnock, gold and silver, Sugar Pine district, A S Gould, 528 Clay street.  
 Moonlight, gold and silver.  
 Montague, gold and silver.  
 Mallard Consolidated Mining Company.  
 Minnesota Consolidated Mining Company.  
 Maria, silver.  
 Minerva, gold and silver, Gild Hill district, L D Ingoldsbys, cor. Merchant and Montg's sts  
 Mount Etna, silver and copper.  
 Muy Rico, silver and copper.  
 Magnolia, gold and silver.  
 Marion, gold and silver.  
 Mount Vernon, gold and silver.  
 Mountain Tunnel.  
 Mammoth, silver, Humboldt district, H C Kibbe, 542 Sacramento street.  
 Morning Star silver, Great Mogul District, C M Conro, 623 Merchant street.  
 Malta, silver, Gold Hill district, A L Chamberlain, 413 Montgomery street.  
 Merchant, silver, Esmeralda district, J F Sterling, 33 Montgomery Black.  
 Mantol, copper.  
 Montgomery, gold and silver, Kern River district, G. J. Turner, 606 Montgomery street.  
 Marble Valley, gold and silver, Ohio district, El Dorado Co., D F Verdenal, 6 Court Block  
 Minnesota, gold and silver.  
 Mary L. Gardiner, Esmeralda.  
 Morning Star, gold and silver, Virginia City, N. T., Wm. A M Van Bokelen, Va. City.  
 Montezuma, gold and silver, El Dorado Canon.  
 Meredith, gold and silver.  
 Mariana, gold and silver.  
 Montgomery Mining Co., g. and s., Monitor dis., Amador, T J Owens, 1 Amory Hall.  
 Mechanics', gold and silver, A B Winegar, 322 Front street.  
 Madrago, gold and silver.  
 Monte Christo, gold and silver, Palmyra district, N. T., M W Weil, 630 Sacramento street.  
 Monte Christo, silver, Kern River district G J Turner, 506 Montgomery street.  
 Mountain, gold and silver, W E Moody, 706 Montgomery street.
- Miller Gold and Silver Mining Co., Smoky Valley, R. R., F W Gross, 436 Jackson street.  
 Manaulana, gold and silver.  
 Mount Washington, gold and silver.  
 Metropolitan, copper, Calaveras County, P B Cornwall, 608 Merchant street.  
 Monte Leone, Copper.  
 Mina Prieta, copper.  
 Murphy's Gulch Mining County, Amador County, C C Bowman, 726 Montgomery street.  
 Madison, gold and silver.  
 Mathewson, gold and silver.  
 Mina Rica de las Flores Mining Company.  
 Moran, gold and silver.  
 Morgan, gold and silver.  
 Margarita, silver and copper, Soledad district, L Franconi, Lucas & Turner's Building.  
 Madison, gold and silver.  
 Mc Donald, gold, silver and copper.  
 Mount Hope, No. 2, gold and silver.  
 Mammoth Consolidated, Excelsior district, M G Elmore, 828 Montgomery street.  
 Mountaineer, copper.  
 Mount Stanislaus, gold and silver,  
 Mohawk, gold and silver.  
 Monitor, gold and silver, El Dorado Canon.  
 McMahon, gold and silver, Devil's Gate district, A Noel, 607 Washington street.  
 McClellan, gold, Virginia district, Jahish Clement, 48 Metropolitan block.  
 Missouri, gold and silver, Big Creek district, M L McDonald, 34 Metropolitan block.  
 Mina, gold and silver, Esmeralda district, John Crowley, 428 Montgomery street.  
 Mount Zion silver and copper, R H Blanding, corner California and Montgomery streets.  
 Munturb & Garland, gold and silver, Virginia district, T Brownjohn, 621 Clay street.  
 Mount Washington, gold and silver, Virginia district, Henry Toomey, 402 Montgomery St.  
 Midnight, gold and silver, Esmeralda district, William V. Garvey, 619 Montgomery street.  
 Metropolitan, gold and silver, Amador county, T J Owens, 1 Amory Hall.  
 Mammoth Ledge, copper, Del Norte county, George F. Sharpe, U. S. Court building.  
 Moselle Mining Company, Esmeralda district, W W Lawton, 400 Montgomery street.  
 Mississippi, Virginia district, G H Bigelow over Parrott & Co.  
 Manzanilla, Sinaloa, Mexico, Thomas Brownjohn, 621 Clay street.  
 Musquito Quartz Mining Company, Edward F. nnard, 433 Montgomery street.  
 Manchester G. & S. M. Company, Monitor dis. Amador, Hugo Dreschfield, 24 Naglee's bd  
 Marronena, silver, Lower California, Wm Faulkner, 411 Clay street.  
 Mina del Norte, San Antonio district, Henry Van Pelt, 436 Jackson street.  
 Mohawk, g & s, Virginia District, H S Dalliby, 604 Montgomery street.
- North Potosi, silver, Virginia dis., E V Joice, cor. Battery and Washington streets.  
 Norman, silver, Flowery district, John F Bailey, 40 Montgomery Block.  
 Napa Quartz Mining Company, Esmeralda district, ———, Napa City.  
 Norton, gold and silver, Virginia district, R N Van Brunt, 706 Montgomery street.  
 Nevada Tunnel & Mining Co., Esmeralda district, ———, Aurora.  
 New El Dorado, gold and silver, Virginia district, ———, Sacramento.  
 New York, gold and silver, Slate Range district, A H Clarke, 522 Montgomery street.  
 Nevada Mining Co., Esmeralda district, P B Cornwall, 608 Merchant streets.  
 Neversink, gold and silver, Esmeralda district, D Clark, Court block.  
 North Star, gold and silver, Humboldt district, J H Gager, Merchant St., Montgomery blk  
 Nightingill, gold and silver, Cinnabar district, A L Chamberlin, 413 Montgomery street.  
 Numa, gold and silver, Mono county, Wm. Fishel, cor. Battery and Sacramento streets.  
 North W Francis, gold and silver, Slate Range district.  
 North Star, gold and silver, Reese River district, J A Drinkhouse, 228 Front street.  
 New World, gold and silver, Wm H Watson, 607 Clay street.  
 New World gold and silver, N Webster, 608 Montgomery street.  
 N Y Po nt G and S M Co, Gold Hill district, N K Lamson, Virginia city.  
 Norman Company, Virginia district, J H Brewer, 40 Montgomery street.  
 National, gold and silver, Esmeralda district, J F Sterling, 33 Montgomery street.  
 Nevada Coal Co, Boiling Springs, Humboldt district, C Gardiner, 3 Barron's Building.  
 North, gold and silver, Star district, James Herriek, 606 Montgomery street.  
 New Era, copper, Salt Spring district, E Barry, 636 Sacramento street.  
 Noonday, gold and silver, Reese River district, L D Ingoldsbys, 80 Merchant street.  
 Niagara, gold and silver, American District, G J Turner, 606 Montgomery street.  
 Nashville, gold and silver, E O Lovell, 436 Jackson street.  
 New Eden, gold and silver, Devil's Gate district, A S Gould, 528 Clay street.  
 Nevada, gold and silver, Nevada district, Cal. S Pinkham, Front street.  
 Noble, copper, Calaveras County, E A Breed, Lucas and Turner's Building.  
 Nevada, copper, Nevada Co, G V, John Armstrong, 610 Merchant street.  
 Napoleon, copper, Calaveras Co, R C Alden, 420 Montgomery street.  
 New Year Diggins, gold and silver, ———, 59 Metropolitan block.  
 Niagara, gold and silver, Colorado district, M G Elmore, 528 Montgomery street.  
 Nevada Gold Quartz Mining Co. Deer Creek, Nevada Co. G W Kinzer, 56 Mont. Block.  
 Ophi, silver, Virginia district, Thos J Lamb, Room 1 Express building.  
 Osceola, gold and silver, Silver City, C W Evans, San Antonio, Alameda.  
 Occidental Mining Co, Emma Frances district, J H Gager, Montgomery street.  
 Orio, Mining Co, Santa Cruz Co, Geo H Kohler, 526 Montgomery street.  
 Oriental, gold and silver, Virginia City, John L Leconey, Virginia City.  
 Oneida, gold and silver, Mono county, E Daniels, Express Building.  
 Oregon, gold and silver, Reese River district, J A Drinkhouse, 228 Front street.  
 O'Donohue, gold and silver, Esmeralda district, T Flitcroft, 617 Clay street.  
 O'Field Ledge Mining Co, Sacramento Co.  
 Oriental, gold and silver, Monitor district, T J Owens, 1 Armory Hall.  
 Owens River, gold and silver, Ira Munson, 317 Montgomery street.  
 Omega Mining Co, Gold Hill district, L D Ingoldby, 80 Merchant street.  
 Oriole, gold and silver, Esmeralda district, Thos Letson.  
 Occidental, copper, Soledad district, E Barry, 636 Sacramento street.  
 Oro Fino, Reese River district, M L McDonald, 34 Metropolitan block.  
 Ophi Mountain, Slate Range district, J B Russell, 410 Montgomery street.  
 Overland, silver, Reese River district, A S Gould, 528 Clay street.  
 Orleans Quicksilver Mining Co., Lake Co, H C Kibbe, 541 Sacramento street.  
 Omaha, copper, Campo Seco, H C Kibbe, 542 Sacramento street.  
 Olive City, copper, La Paz, Thos Brownjohn, 621 Clay street.  
 Owens' River, gold and silver, Inyo district, Tulare Co, E C McComb, 621 Clay street.  
 Ophi Silver Mining Co. Slate Range district, John B Russell, 410 Montgomery street.
- Potosi, gold and silver, Virginia district, J F Lightner, Metropolitan block.  
 Pride of the Antelope, gold and silver, Esmeralda district, ———, Aurora.  
 Porter, gold and silver, Lamb Ledge, R C Page, 420 Montgomery street.  
 Philadelphia, gold and silver, Slate Range, district, A H Clark, 522 Montgomery street.  
 Pena, silver, San Antonio, L C Wm. Faulkner, 411 Clay street.  
 Peytona, gold and silver, Virginia district, C Stevens, 6 Parrot's building.



- Polar Star, gold and silver, Esmeralda district, M B Ashim, Sacramento.  
 Peerless, gold and silver, Buena Vista district, A L Chamberlain, 413 Montgomery St.  
 Pioneer, silver, Washoe district, Wm A M Van Bokkelen, Virginia City.  
 Pacific, gold and silver, Mono Co., H R Reed, 321 Washington street.  
 Portland, silver, Aurora, Geo Bower, Montgomery street.  
 Pond, gold and silver, Esmeralda district, P B Conwall, 608 Merchant street.  
 Pride of Esmeralda, gold and silver, Esmeralda district, J F Bailey, 605 Sacramento St.  
 Paul Thompson, gold and silver, Esmeralda district, George Bower, Montgomery street.  
 Pioneer Coso, Coso district, E B Holmes, 712 Montgomery street.  
 Pauline, gold and silver, Esmeralda district.  
 Pride of Wide West, Esmeralda district, John Crowley, 428 Montgomery street.  
 Prospero, gold and silver, Humboldt district, V B Post, Lucas & Turner's building.  
 Pride of Ophir, Esmeralda district, Thos Brownjohn, 621 Clay street.  
 Pepita, silver, Dev's Gate district, Gomer Evans, 338 Montgomery street.  
 Pine Nut Consolidation, silver, Reese River district, A S Gould, 528 Clay street.  
 Pilot Hill Consolidation Mining Co. Greenwood district, D F Verdenal, 636 Clay street.  
 Plutonia, gold and silver, Devil's Gate district, J L Pool, 540 Washington street.  
 Prince Imperial, gold and silver, Calaveras Co. J Woodthorpe, 326 Clay street.
- Princess, gold and silver, Colorado district, New Mexico, R Clark.  
 Pride of the West Mining Co. Silver City, L D Ingoldsby, 80 Merchant street.  
 Pacific Star Con, gold and silver, Star district, J L Pool, 540 Washington street.  
 Piney Creek, gold, silver and copper, Mariposa Co. Jos. Dardano, Lucas & Turner's Bdg.  
 Palmyra Consolidation, gold and silver, Palmyra district, C W Curtis, 606 Montgomery st.  
 Pensacola, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 Poor Man's Mining Co. Prince Royal district, W Sparrow, 543 Clay street.  
 Puritan, gold and silver, H B Congdon, 621 Washington street.  
 Pride of Washoe, gold and silver, Washoe district, Wm E Moody, 706 Montgomery street.  
 Providence, gold and silver, Nevada Co. J M Buffington, 12 Government House.
- Pioneer Mill and Mining Co. Reese River district, L D Ingoldsby, 80 Merchant street.  
 Parker Tunnel, gold, Esmeralda district, A S Gould, 528 Clay street.  
 Princess Royal, gold and silver, T C McCallan, 617 Clay street.  
 Peninsular Mining Co. Lower California, D A Jennings, 606 Front street.  
 Pacific Quicksilver Mining Co. Lake Co. H C Kibbe, 543 Sacramento street.  
 Plymouth Quarz Mining Co. Kelsey district, L D Ingoldsby, 80 Merchant street.
- Quincy Mining Co. Plumas Co. ——— Quincy, Plumas Co.  
 Queen City, gold and silver, El Dorado Canon.  
 Queen of the West, gold and silver, E E Phillips, Gold Hill.  
 Quaker City Little Giant, gold, silver and copper, Clayton district, W L Kirbe, 610 Clay st.  
 Quartz Mountain, gold and silver, El Dorado Co. F W Gross, 476 Jackson street.  
 Queen of the West, Reese River district, T Brownjohn, 621 Clay street.
- Rogers, silver, Flowery district, John F Pope, 113 California street.  
 Real del Monte Con. gold and silver, Esmeralda district, S Pattee, 522 Montgomery street  
 Reese River, gold and silver, Reese River district, R N Van Brunt, 706 Montgomery st.  
 Red, White and Blue, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery.  
 Rochester, gold and silver, Slate Range district, A H Clark, 522 Montgomery street.  
 Ruth Windsor, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Rhodes Dig. ings Quartz Mining Co. Esmeralda district, G Touchard, 414 Montgomery st.  
 Recorder, gold and silver, Storey Co. J S Davies, 18 Montgomery block.  
 Ruby, gold and silver, Star district, W H Martin, 617 Clay street.  
 Realito, gold and silver, Sonora, Mexico, W C Budd, 412 Sansome street.  
 Rip Van Winkle, gold and silver, Esmeralda district, M G Elmor, 528 Montgomery street  
 Rosebud, gold and silver, Esmeralda district, J M Burnett, 605 Montgomery street.  
 Rochester, gold and silver, Esmeralda district, Isaac Labor, 7 Armyory Hall.  
 Roanok, gold and silver, Esmeralda district, Jas Herrick, 605 Montgomery street.  
 Railroad, silver, Reese River district, A S Gould, 528 Clay street.  
 Rough and Ready, gold and silver.  
 Red Jacket, gold and silver and copper, Nevada county, C W M Smith, 27 Federal bld.  
 Rife, gold and silver.  
 Relief, gold, silver and copper.  
 Rose Spring Water and Mining Co. Coso district, W W Lawton, 400 Montgomery street.  
 Ragdale, gold and silver.  
 Ragas, gold and silver.  
 Russel, gold and silver.  
 Red Rock, gold and silver.  
 Rich Hall, gold and silver.  
 Ruth Windsor Tunnel Co. Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Rhodes North Ex. Mining Co. Folsom district, L Maubec, 716 Montgomery street.  
 Rambler Mining Co. Slate Range district, Wm V Garvey, 619 Merchant street.  
 Rose Quartz Mining Co. Eagle and Washoe districts, Jas Herrick, 606 Montgomery street.  
 Rising Sun, copper, Clayton district, W S Kirby, 610 Clay street.  
 Rock River, gold, H C Kibbe, 542 Sacramento street.  
 Red Butte Mining Co. Esmeralda district, W W Lawton, 400 Montgomery street.  
 Royal Eagle and Cliff, gold and silver, J Krieg, 755 Clay street.  
 Ravenna, gold, Arizona Territory, Jules P Cavillier, 619 Washington Street.  
 Rose Spring, Hump of the Dip, Pilot Knob district, G J Turner, 606 Montgomery street.
- Scorpion, silver, Virginia district, W H Martin, 617 Clay street.  
 Sierra Nevada, silver, Virginia district, J H Brewer, 40 Montgomery block.  
 Silver City, gold and silver, Silver City, O Risdon, cor Battery and Bush.  
 Succor, gold and silver, Gold Hill district, R H Waller, 1 and 2 Montgomery block.  
 Shelton, silver, Argentine district, J S Davies, 18 Montgomery Block.  
 Sierra, silver, Genoa district, S P Vandyke, 127 Clay street.  
 Sierra Lumber and Mining Co. Genoa district.  
 St. Louis, gold and silver, Gold Hill district, J H Brewer, 40 Montgomery Block.  
 Silver Mound, silver.  
 Silver City Quartz Mill Co. Silver City, E Bauer, 414 Washington street.  
 Scoria, Virginia district.  
 Swansea Mill and Mining Co. Silver City.  
 Sapphire Quartz Mill and Mining Co.  
 Santiago, gold and silver, Silver City, E A Breed; Lucas & Turner's Building.  
 Santa Rosa, gold and silver, Virginia district, Nelson Hudson, Front street.  
 Sacramento, gold and silver, Virginia district, S W Moore, 408 California street.  
 Sam Wright, Esmeralda district, E Worth, 547 Washington street.  
 Sierra Butte Quartz Mining Co. Sierra Co.  
 Sigel, gold and silver, Humboldt district, J H Gager, Merchant st., Montgomery Block.  
 Savage Mining Co. Virginia district, G B McAneny, 712 Montgomery street.  
 St. George, gold and silver, Virginia district, Wm O Smith, Virginia City.  
 Slate Range, gold and silver, Slate Range district, A H Clark, 522 Montgomery street.
- South Utah, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street.  
 Sol Lewis, gold and silver, Esmeralda district, John Crowley, 428 Montgomery street.  
 San Francisco, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 San Marcial, silver, Sonora, Mexico, R N Van Brunt, 706 Montgomery street.  
 San Bernard, silver, Star district.  
 San Jose, silver, Lower Mexico.  
 Sacramento East, gold and silver, Slate Range district, W H Clark, 224 Montgomery st.  
 Sonora, gold and silver, Esmeralda district, H D Bequette, Aurora.  
 Sam Patch, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 Silver Mound, gold and silver, Grass Val., Nevada Co. John Armstrong, 610 Merchant St.  
 Strawberry, gold and silver, Esmeralda district, H D Bequette, Aurora.  
 Sutr, gold and silver, Virgin a district, N W Winton, Virginia City.  
 Shoshone, silver, Lander Co. M J Newmark, 522 Montgomery street.  
 Sugar Pine, gold and silver, Tuolumne Co. S D Jones, Custom House.  
 Seneca, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Silver Age, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Sotogome, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 St. Clair, gold and silver, Esmeralda district, E Worth, 547 Washington street.  
 Schmeltzer, silver, American district, M G Elmore, 528 Montgomery street.  
 St. George, gold and silver, Humboldt district, A L Chamberlain, 413 Montgomery street.  
 San Jose de Vantanas Mining Co. Durango, Mexico.  
 Summit Pass Mining Co. Tuolumne Co. T B Ludlum, Flint's warehouse.  
 San Francisco, gold and silver, Slate Range district, G J Turner, 606 Montgomery street.  
 Sheba, gold and silver, Star district, R C Harrison, 6 Naglee's Building.  
 San Francisco, gold and silver, Colorado district, H C Kibbe, 542 Sacramento street.  
 South Sonora Mining Co. Esmeralda district, J H Burnett, 605 Merchant street.  
 San Carlos Exploring and Mining Co. Tulare Co. W W Lawton, 400 Montgomery street.  
 Schiller, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Salinas, gold and silver, Monterey, Geo E Whitney, 9 Montgomery Block.  
 Soledad, silver, Soledad district, Geo H Russell, 636 Sacramento street.  
 South Potosi, gold and silver, Buena Vista district, J S Luty, 305 Montgomery street.  
 Scott Exploring and Mining Co. Humboldt district, L Franconi, Lucas & Turner's Bdg.  
 St. Charles, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Stonewall Consolidation, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street  
 Siam, gold and silver.  
 Sunbeam, 1st SW Extension, Esmeralda district, T Brownjohn, 621 Clay street.  
 Sa ta Isabel, silver.  
 Siskiyou, gold and silver.  
 Snell Exploring and Mining Co.  
 Salvador, gold and silver.  
 San Francisco, gold and silver, San Francisco district, M G Elmore, 528 Montgomery st.  
 Smoky Valley, silver, Lander Co. A S Gould, 528 Clay street.  
 Spring Valley, copper.  
 Silver State Mining Co. Virginia district, J S Davies 18 Montgomery Block.  
 Salazar, silver, La Paz, Arizona, C I Eaton, over Keith's drug store.  
 Sweet Vengeance, gold and silver, A Vavillier, 610 Front street.  
 Soledad Pass, copper.  
 San Francisco, silver, Potosi Ledge, N Shiverick, cor Montgomery and Clay.  
 Silver Mount, copper, Esmeralda district, S Pattee, 522 Montgomery street.  
 Saxondale, gold and silver.  
 South Hawley Mining Co. Virginia district, J F Pope, 113 California street.  
 Stella Mining Co. Virginia district, J S Davies, 18 Montgomery Block.  
 Sharon Mining Co. Virginia district, J S Davies, 18 Montgomery street.  
 Salambo, copper, Tuolumne, L Franconi, Lucas & Turner's Building.  
 Saginaw Quartz Mining Co.  
 San Rafael, gold and silver, Marin county, F H Rogers, 607 Washington street.  
 Stevenson-Khoe Mining Co. Gold Hill, Wm Willis, 712 Montgomery street.  
 Stanislaus Union, gold and silver, H O Howard, 523 Montgomery street.  
 Scottie, gold and silver.  
 Sierra Consolidation, gold and silver, M F Hitchcock, 305 Montgomery street.  
 Sam Moore, gold, silver and copper, Clayton district, L Powers jr. 309 Front street.  
 Santa Rosa Mining Co.  
 Steptoe, gold and silver.  
 Surprise, gold and silver.  
 Sonora, gold and silver, Virginia district, L D Ingoldsby, 80 Merchant street.  
 Santa Rosa, gold and silver, E Polhemus, 413 California street.  
 Silver Age, gold and silver, Virginia district, — Mygett, Virginia City.  
 Sag new Quartz Mining Co. Tulare Co. F W Gross, 436 Jackson street.  
 Sailor, gold and silver, Blue Mountain district, H Dreschfeld, 24 Naglee's Building.  
 Syren, gold and silver, Calaveras Co. Leon Maubec, 716 Montgomery street.  
 Suburban, gold and silver, Mission Dolores, M Calkin, 326 Clay street.  
 Seneca, gold and silver, Santa Cruz Co. M Calkin, 326 Clay street.  
 Saratoga, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Silver Light, gold and silver, Gold Hill district, F Vassault, 4 Barron's Building.  
 South Esmeralda, gold and silver, Esmeralda district, Wm V Garvey, 619 Merchant street.  
 San Francisco, silver, Reese River district, A S Gould, 528 Clay street.  
 Silver Wedge, gold and silver, N Shiverick, cor Montgomery and Clay.  
 Silver Star, gold and silver, Virginia district, W E Moody, 706 Montgomery street.  
 San Antonio, silver, P Van Pelt, 810 Sansome street.  
 Soledad, copper, Soledad district, E Barry, 636 Sacramento street.  
 Silver Age, copper, Humboldt district, E Flanagan, 8 Naglee's Building.  
 San Lorenzo, gold and silver, Santa Cruz Co. M Calkin, 326 Clay street.  
 Star Light, gold and silver, Humboldt district, J H Gager, Merchant street.  
 Silver Butte Consolidated Silver Mining Co. Silver Butte dist. M G Elmore, 528 Montgomery.  
 San Mateo Copper and Cannel Coal Mining Co., San Mateo and Santa Clara.  
 Soledad Hill, copper, Los Angeles county, Jule P Cavillier, 619 Washington street.
- Tennessee, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 Tucker, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street  
 Triunfo, gold and silver, San Antonio, L C, H S Brooks, 536 Clay street  
 Tigre of Colorado, gold and silver, Durango, Mexico, E W Newman, 737 Union street  
 Techtaccup, gold and silver, Colorado district, E B Holmes, 712 Montgomery street  
 Third South Utah, gold and silver, Esmeralda district, Moses Frank, 609 Clay street  
 Tri-Union, gold and silver, Flowery district, N Shiverick, cor Montgomery and Clay  
 Tucker Tunnel Co. Esmeralda district, P B Cornwall, 608 Merchant street  
 Transmontane, Star district, W E Moody, 706 Montgomery street  
 Toquima, silver, Reese River district, A S Gould, 528 Clay street  
 Tulare Mining Co. Rodney Clark, 422 Montgomery street  
 Telegraph, gold and silver, Excelsior district, Wm V Garvey, 619 Merchant street  
 Tamilpais, Marin Co. S B Rooney, Government House  
 Triton, gold and silver, Virginia district, W E Moody, 706 Montgomery street  
 Tesora, gold and silver, Lower California, H E Kibbe, cor Sansome and California



Table Mountain, copper, Calaveras Co. M G Elmore, 528 Montgomery street  
Texas, gold and silver, Cedar Hill district, J G Libby, Virginia City  
Tescalamina Mining Co. Lower California, J H Blood, 7 Montgomery Block  
Telegraph, gold and silver, Amador Co. T J Owens, 1 Armory Hall  
True Delta, copper, Del Norte Co. John F Pope, 113 California street.

Utah, gold and silver, Flowery district, J H Gilchrist, Virginia City  
Utah Mining Co. Esmeralda district, ———— Aurora  
Union Consolidated, gold and silver, Reese River, C S Higgins, 410 Montgomery street  
Union Tunnel Co. Esmeralda district, A J Simmons, Aurora  
United States, gold and silver, Virginia district, S B Rooney, 8 Government House  
Union, silver, Nevada Territory  
Utica, gold and silver, Calaveras Co.  
Uncle Sam, gold and silver, Silver Mountain, T J Owens, 1 Armory Hall  
Union No. 2, gold and silver, Reese River district, J A Drinkhouse, 228 Front street.  
Union, gold and silver, Russ district, J B Russell, 410 Montgomery street  
Utah Consolidated, gold and silver, Reese River district, T Brownjohn, 621 Clay street  
United Ledges, silver, Humboldt district, E Flanagan, 8 Naglee's Building.  
United Ledges, gold and silver, Silver Hill district, E Flanagan, 8 Naglee's Building.

Virginia Hill, gold and silver, Virginia district, H Butenoss, Virginia City.  
Vibbard, gold and silver, Esmeralda district, Jas Neary, 320 Clay street.  
Villarino Mining Co. Lower California, J D Creigh, cor Montgomery and California.  
Virginia Rogers Mining Co. Nevada Territory, E B Holmes, 712 Montgomery street.  
Vulcan, gold and silver, Coso district, J H Gager, Merchant st., Montgomery Block.  
Vesuvian, gold and silver, J P Nourse, Lucas & Turner's Building.  
Veatch, silver, Simpson's Park, E B Holmes, 712 Montgomery street.  
Venus, gold and silver, Buena Vista district, J L Pool, 540 Washington street.  
Victor Hugo, gold and silver, Humboldt district, E Flanagan, 8 Naglee's Building.  
Victoria, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.

Washoe, gold and silver, Gold Hill district, D A Jennings, cor Jackson and Front.  
Washoe Manufacturing and Mining Co. ———— Marysville.  
Wide West Mining Co. Esmeralda district, Coll Dean, 325 Montgomery street.  
White & Murphy, gold and silver, Virginia district, J P Nourse, Lucas & Turner's Bdg.  
White Cloud, gold and silver, Virginia district, L A Stanchfield, 605 Montgomery street.  
Willow Springs, gold and silver, Coso district, J H Sayre, 224 Montgomery street.  
Wyoming, gold and silver, Esmeralda district, P B Oppenheim, Aurora.  
Wm. Penn, gold and silver, Devil's Gate district, Henry Toomey, cor California and Mont.  
Washington, gold and silver, Slate Range district, W H Clark, 224 Montgomery street.  
Winnemucca 1st Extension, gold and silver Silver Hill district, J T McMahon, Silver City.  
Worden, gold and silver, Monitor district, C H Wakelee, 612 Merchant street.  
Winashick, gold and silver, Coso district, V C Post, Lucas & Turner's Building.  
Washington, gold and silver, Great Eastern Ledge, L F Yates, Virginia City.  
Wilson, copper, Garden Bar district, Geo Bowes, 610 Clay street.  
Washington, gold and silver, El Dorado Canon, T G Murphy, Virginia City.  
Wm. Penn, gold and silver, Monitor district, A L Chamberlin, 413 Montgomery street.  
Wasson Consolidated, gold and silver, Reese River district, J Herrick, 606 Montgomery.  
Washington, g, s and t, Boiling Springs district, C Gardner, 3 Barron's Building.  
Wisconsin, gold, Virginia district, Jabish Clement, Metropolitan Block.  
Wm. B. Astor, gold and silver, Gold Hill district, J T Steele, Virginia City.  
Warren, gold and silver, Excelsior district, Wm V Garvey, 619 Merchant street,  
Washington, copper, Tuolumne Co. H L Brooks, Government House.  
White Cloud, gold and silver, Star district, T J Owens, 1 Armory Hall.  
Wyandott and Chrysopolis, gold and silver, Garibaldi district, E Flanagan, 8 Naglee's bdg.  
Winters, g & s, Argentine D stric, C W Jones, 32 and 33 Montgomery Block.  
White Horse, g & s, Humboldt county, H S Dalliba, 604 Montgomery street.

Young Wnenucca, gold and silver, Esmeralda district, ———— Aurora.  
Yellow Jacket, silver, Gold Hill district, E Caldwell, Gold Hill.  
Yreka, gold and silver, Esmeralda district, C W Curtis, 606 Montgomery street.  
Yarborough, silver, El Paso district, E Barry, 636 Sacramento street.  
York River, gold and silver, John Gorman, 423 Battery street.  
Young America Ocher, gold and silver, Amador Co. G J Turner, 606 Montgomery street.

Zephyr, gold and silver, Lyon Co. N. T.

**WEALTH OF GOLD HILL, SONORA COUNTY.**  
We clip the following from the "Sonora Flag," of July 30th. "Under the energetic and capable superintendence of N. P. Turner, Esq., the Gold Hill quartz mines, immediately in this city, are developing astonishing wealth. We saw Mr. Turner with a tubful of rocks—the richest we ever saw—which were over half gold. Some had been broken with the pick, but so completely was it interbound by fibres of gold, that the fractured pieces refused to come apart. A 'breakdown' in the mine, day before yesterday, displayed the shining particles, on both sides and above the drift. The shaft is in the immediate vicinity of the place where the prodigious strike was made, a few years ago, and is actually on the same vein. The owners have about as good a thing as they want, and refuse to let any of the stock go into market."

**RAILROAD HOUSE.**—Our personal friend, Mr. H. T. Fulron, has lately purchased a half interest in this Establishment. From considerable acquaintance with Mr. F., we know no man, more capable of "keeping a hotel" in first class style. Under the present management, the RAILROAD HOUSE is second to none, in all the requisites of comfort and convenience, and we trust our numerous patrons in the country, will be advised by us, and on visiting San Francisco, give it a trial.

**RICH.**—We saw a small silver brick, the past week, weighing 6 oz, taken by Varney, from 50 lbs. of average rock from the Minna del Norte mine, situated in San Antonio District, Lower California, about 20 miles from Ventana Bay. This is a newly discovered mine, located by a San Francisco Company. The rock thus tested by Mr. Varney, was a fair average for arastra working.

**REMOVAL.**—Messrs. Gallagher, Weed & Co. have removed their Brass and Bell Foundry from their late stand on Oregon St., to 125 Front Street, opposite Minna, where they are prepared to answer all orders in their line, at the shortest notice.

**SUPPORT HOME MANUFACTURES.**—All home manufactures have an interest to us, simply because every article thus brought into our local market is an addition to the wealth and importance of the State. For this reason we beg of our numerous readers to pay a visit to the trunk manufactory of Mr. James Longshore, under the Tehama House, Sansome street, where they will find the best workmanship, and cheapest goods of the kind, in the city.

**NEW OFFICE.**—Messrs. D. C. Williams & Co., Mining Brokers, have removed into their fine new office, No. 605 Washington street, between Montgomery and Kearney Sts.

We append in the following supplement, a list of Mines to which we have not yet obtained the names of Secretaries, and to a very large extent, even the locality of the mine is not known to us. They will be placed in the preceding Catalogue as fast as the necessary data can be obtained. The attention of Secretaries and other parties interested is called to the deficiency alluded to.

Alcyon, g & S, Big Creek District.  
Aladin, g & s, Smokey Valley district  
Apollo, g & s, Reese River district.  
Alhambra Hill, g & s, Summit district.  
Arch, g & s, Silver Mountain district.  
Atlanta, g & s, Devils Gate district.  
Alba Nueva, silver, Humboldt county  
Alpine Copper Co., Contra Costa county  
Adelaide Con., silver, Colorado, N T  
Apache Chief Mining, Co. Arizona  
Antiquarian, g & S, Smoky Valley  
Altaville Quartz Mining Company, Calav. Co  
Astor, gold and silver, Lander county.  
Atlanta, gold and silver, Lander county  
Apollo, gold and silver, Amador county  
Admiral, gold and silver, Humboldt county  
Austin, gold and silver, Reese River district  
Au-ria gold and silver  
Albany, gold and silver, Devils Gate district  
Atlantic, gold and silver Contra Costa coun.  
Anderson, copper, Contra Costa county  
Anacoluton, gold and silver, Colorado distr  
Albeus, silver,  
Bunker Hill, gold and silver, Lander City  
Boo, gold and silver, Silver Mountain  
Big Giant, gold and silver, Lander county  
Baltimore, gold and silver, Silver Mountain  
Black Ledge, gold and silver, Reese River  
Bolivia, gold and silver, Gold Hill  
Belfast, gold and silver, Devils Gate  
Benjamin, gold and silver, Devils Gate  
Bright Star, silver, Reese River  
Bull Run, copper, Amador county  
Blue Mountain Peak, g & s, Calaveras co  
Blumenthal, gold and silver, Smoky Valley  
Boos, gold and silver, Coso district  
Bald Eagle, gold, Nevada county  
Bryan & Watson, gold and silver Lander co.  
Bunker Hill, gold and silver, Reese River  
Brown, gold and silver, Amador county  
Bamboo Chief, gold and silver, Amador  
Bell & Baldwin Tun and M Co., Esmeralda,  
Bodie Mammoth Tun Co, Bodie district.  
Bay City, gold and silver, Clayton district.  
Blue Jacket, gold and silver, Devil's G Dis.  
Blue Dragon M Co, State of California.  
Beard & Seavy, g and s, Reese River Dist.  
Bald Mountain, g and s, Tuolumne County  
Baja California, gold and silver, Lower Cal.  
Ben Franklin, silver and copper, Mt. Diablo.  
Baker, copper, Whiskey Diggings.  
Bauner, g and s, Humboldt Co. N T  
Boden & Larkin, silver  
Bellingham Bay, coal  
B B Mining Co. Esmeralda  
Bunker Hill Qtz, California  
Badger, gold and silver, Humboldt Co.  
Calaveras, silver, Silver Mountain district  
Comstock, gold and silver, Alpine d, Am C.  
Clara, gold and silver, Inyo district  
Capitola, gold and silver Uvas district.  
Coquette, g, s and cop, Clayton district  
Claresey, g and s, Palmyra district  
Chifronena Mining Co. Sonora, Mexico  
Chaparal Hill, M Co. Calaveras Co.  
Copper Hill M Co. Del Norte County.  
Clear Creek, silver, Humboldt County, N T  
California, g and s, Humboldt County, N T  
Caesar, c, g and s, La Paz district  
Coronilla, g and s, Sonora, Mexico  
Caxton, gold and silver, Virginia district  
Colegrove, gold and silver, Virginia district  
Clay street, c and s, Red Mountain, N T  
Cincinnati, silver, Reese River  
Chollar Mining Co. Yuba County  
Cleopatra, g and s, Lander Co.  
Cosmopolitan, copper, Calaveras County  
Campbell, g and s, Gold Hill  
Cyprus Mining Co. Contra Costa County  
Chilpanzingo, Guerrero, Mexico  
Copper Age, g and s, Contra Costa County.  
Copper Age Mining Co. Clayton district  
Columbus, g and s, Reese River  
Casata, silver, Sinaloa  
Carson Hill, g and s, Calaveras County.  
California, silver and copper, Mount Diablo  
Constitution, silver and copper, Mt. Diablo  
Caledonia, coal, San Mateo County  
Comstock, g and s, Lower California  
Chrysopolis, g and s, Inyo district  
Colima, gold and s, Blue Mountain district,

Dawn Farm Quarry, Devil's Gate district  
Daniel Webster, gold and s, Devil's Gate d  
Diana, gold and silver, Reese River  
Don Juan, gold and silver, Esmeralda  
Dowd, gold and silver, Lyon County  
Dundas, gold and silver, Devil's Gate  
Defance, gold and silver, Gold Hill  
Delfina, copper, Sonora, Mexico  
Dexter Mining Co. Silver Butte district  
Diamond, gold and silver, Reese River  
Del Norte Comstock Co. Del Norte Co  
Dublin, gold and silver.  
Dubuque, gold and silver, Galena district  
Ducheno, gold and silver, Sacramento Co  
Douglas, gold and silver, Lander Co  
Daylight, gold and silver  
Diana, copper, Del Norte Co  
Excelsior, g and s, Reese River  
El Dorado, gold and silver, Silver Mtn dis  
El Dorado, Con. g and s, Devil's Gate dis  
El Alamo de San Antonio, S Antonio, L C  
Express, g and s, Devil's Gate district.  
El Taste, silver, Sonora, Mexico  
Eugene L Sullivan M g co, San Francisco co  
Elle y, silver, Smoky Valley  
Eclipse Tunnel co Humboldt co  
East Range, g and s, Humboldt co  
Express Mining co, Russ district  
Eureka and Elizabeth Con. s and c, Cal. co  
Enterprise, g and s, Colorado district  
Empire Mining and Tun. co, Humboldt co,  
Emigrant No 2, g and s, Lyon co  
Eclipse Mining co, Reese River  
Ella Francis, Esme alda  
Eastern Star, Tuolumne co  
Federal States, g and s, Esmeralda  
Franklin, g and s, Lander co  
Frank, g and s, Amador co  
Excelsior, gold and silver,  
Emanuel, gold and silver.  
Eastern, gold and silver.  
Exile, gold and silver.  
Eureka, gold.  
Empire, silver.  
Eureka Coal Mining Company.  
Emma Antoinette, gold, silver and copper.  
Excelsior No 2, gold and silver.  
Eureka Shafer Consolidation Mining Co.  
Esperanza, gold and silver.  
Freyberg, silver.  
French, gold and silver.  
Fontaine, gold and silver.  
Figaro, g and s, Amador co  
Flor Nightingale, gold and silver, Esmeralda  
Fairchild, c, gold and s, Spring Valley  
Forest Queen, gold and silver G Mogul dis  
Florida, gold and silver  
"420" Mining Co, Virginia district  
Fusi Yama, g and s  
Fidelity, g, s and c, Contra Costa co  
Favorite Mining co, Virginia district  
Great Eastern, g and s, Silver Mountain  
Gov. Downey Con. g and s, Humboldt co  
G Id Bluff Mining co, Humboldt co  
Geo. Washington, g and s, Oro Fino dis  
Gen. Hill, silver, Summit district  
Great Chieftain, g and s, Lander co  
Grey Ledge, g and s, Calaveras co  
Granite Cop. Mining co, Contra Costa co  
Gem, g and s, Sierra district  
Grisson Con. Arizona  
Great Eastern, g and s, El Dorado Canon  
Great Republic, g, s and c, Contra Costa co  
Grosh Con. g and s, Gold  
Gen. Jackson, g and s, Lyon co  
Great Con. of Esmeralda, g and s, Mono co  
Governor, g and s, San Bernardino co  
Gen. Wright, g and s, Devil's Gate district  
Golden Era, g and s, Reese River  
Great Basin Mining, Nevada Territory  
Golden Gate, copper, Contra Costa co  
Gopher, c, g and s, Calaveras co  
Gen. Kibbee, g and s  
Garabaldi and Belvidere Con. g, s and c  
Garratt and Grant, g and s, Esmeralda  
Great Central Mining co, Weaver dis. A T  
Golden Ark, g and s, Mariposa co  
Hancock, g and s, Amador co  
Horn, gold and silver, Russ district.  
Honest Miner, Reese River  
Humboldt Tunnel Nevada Territory  
Humboldt Tunnel co, g and s, Esmeralda  
Healy Con. g and s, Lander co  
Hobson Con. cop. mining co, Santa Clar co  
Hydraulic mining co, Contra Costa co  
Harris Bros. g and s, Blue Mountain  
Hope, g and s, Reese River  
Haval, silver Sinaloa  
Harriet Lane, g and s, Nevada Ter  
Hooker, g and s, Humboldt co  
Horse Shoe, silver and copper  
Hutchinson, gold, silver and copper



Henrietta and Sophia Mining Co. Lower Cal  
High Peak Tunnel and Mining Company.  
Humboldt Great Consoles Mining Company.  
Howard, gold and silver.  
Healy, gold and silver.  
Independence, g and s, San Francisco dis  
Isabel, gold and silver, La Paz  
Illinois, gold and silver, Silver Mountain dis  
Impression, gold and silver, Garden Bar dis  
Inyo, gold and silver, Inyo district  
I X L, gold and silver, Silver Mountain dis  
Intrepid, gold and silver, Yuba Co.  
Ina Ledge, gold and silver, Devil's Gate dis  
Isabel and Agnes Land, g and s, Humboldt d  
Independent, gold and silver, Amador Co.  
Ida Mill and Mining Co. Owen's River  
Indian Valley, g and s, Plumas Co.  
Ida, gold and silver, Lower California  
J C Fremont, gold and silver, Silver Mount.  
Jura, gold and silver, Gold Hill  
Julus, gold and silver, Reese River  
Joe Lane, gold and silver, Reese River  
Jum, gold and silver, Esmeralda  
Jefferson, gold and silver, Reese River  
Julia, gold and silver  
Janesville, gold and silver, El Dorado Co.  
Jefferson Galena, g and s, Plumas Co.  
Kohinoor, g and s, Big Creek district  
Kate Oliver, gold and silver, Argentine dis.  
Kinsman, gold and silver, Santa Clara Co.  
Kelsey, gold and silver, El Dorado Co.  
Kobler, gold and silver, Reese River  
Knickerbocker and Monumental Consolida-  
tion, gold and silver, Contra Costa  
Lake Superior, copper, Santa Clara  
Lone Star, gold and silver, Silver Mountain  
Lucky Star, silver, Silver Mountain  
Lunar Consolidation, g and s, Esmeralda  
Lennox, g and s, Slug Gulch, El Dorado Co  
Los Angeles & Mexican Con. Colorado dis  
Lancok Mill and Mining Co. Storey Co.  
La Sinaloa, silver, Sinaloa, Mexico  
Leo, gold and silver, Gold Hill  
La Libertad, silver, Sinaloa, Mexico  
Lacy Ella, gold and silver, Gold Hill  
Lander Silver Ledge Co. Reese River  
Lady Bell, gold, Del Norte Co.  
Lightner, gold and silver, Reese River  
La Candelaria, silver, Lower California  
La Ravena, gold  
Landscape Mining Co. Contra Costa  
La Buena Fortuna, silver  
La Libertad, gold and silver, Lower Cal.  
La Candelaria Mining Co. Durango  
Lancha Plana, copper, Amador Co.  
Liverpool, gold and silver, Humboldt Co.  
Lake Water, Esmeralda and Bodie  
Mountain, gold and silver, Amador Co.  
Mountain, gold and silver, Silver Mountain  
Manchester, gold and silver, Amador Co.  
Metropolitan, gold and silver, Amador Co.  
Mountain Glen, gold and silver, Big Creek d  
Magdalena, gold and silver, Esmeralda  
Minnie Lota, gold and silver, Esmeralda  
Mona, gold and silver, Devil's Gate district  
Mineral Mountain, g and s, Calaveras Co.  
Monte Albano, gold and silver, Esmeralda.  
Mountain View, gold and silver, Calaveras  
Monitor, gold and silver, Amador Co.  
Metropolitan, gold and silver, Monterey Co.  
Mystic, gold and silver, Gold Hill  
Martinez, gold and silver, Reese River  
Morning Star, gold and silver, Reese River  
Monitor, gold and silver, El Dorado Canon  
Magnolia, gold and silver, Tuolumne Co.  
Moscow, gold and silver, Esmeralda  
Malta, gold and silver, Nevada Territory  
Melones Creek, gold and silver, Calaveras Co  
McMahon, gold and silver, Devil's Gate  
McClelland, gold, silver and copper, Nevada  
Moselle Mining Co. Last Chance Hill  
Morning Star, gold and silver, Clayton dis  
Maxwell Creek, gold  
Midnight, gold and silver  
Mammoth, gold and silver, San Bernardino  
Mosquito Quartz, Calaveras Co.  
Mandolin, gold and silver  
Monumental, silver  
Mission Dolor's Mining Co. San Francisco  
Montezuma, gold and silver, Contra Costa  
Mountain Queen, gold and silver, Reese River  
McGregor, gold and silver, Silver Mountain  
North Central, gold and silver, Big Creek  
Napa, gold and silver, Silver Mountain  
Nelson, Inyo district  
Niagara, gold and silver, Tuolumne Co.  
Napoleon, gold and silver, Smoky Valley dis  
North Transit, g and s,  
New World Consolidated, g and s  
New Gold Hill Mining Company  
New Emmett, gold and silver  
New Antrim, gold and silver

Nonpareil, gold and silver  
Noonday, gold, silver and copper  
North Star, gold, silver and copper  
Newsom, gold and silver, Devil's Gate dis  
Nacosari, g. s and c, Sonora, Mexico  
Noah Webster Mining Co. Humboldt Co.  
North Star Consolidation, g and s, Coso dis  
Norman, gold and silver, Amador Co.  
No Plus Ultra, gold and silver, Clayton dis  
National, gold and silver  
Nuestro Señora del Refugio, s, Sonora, Mex  
Niagara Con. gold and s, El Dorado Canon  
Natividad, gold and silver, Reese River  
No Plus Ultra Con. Mining Co. Arizona  
Nevada Gold Quartz, Nevada Co.  
Original Gould & Curry, g and s, Silver Mtn  
Ossicola Hill, silver, Summit district  
Ossian Copper mining co, Calaveras co  
Ophir and Auburn Con. g and s, Placer co  
Old Saxon mining co, Virginia dis  
Oxford, silver, Tuolumne co  
Ohio, g and s, Devil's Gate  
Ottawa, g and s, Devil's Gate  
Ophir of the Colorado, sil. Colorado dis  
Old Thirteen, g and s, Silver Mountain  
Octoroon, g and s, Reese River  
Oneida, g and s, Gold Hill  
Old John Brown, silver  
Oregon, Inyo dis  
Ossipee, g and s, El Dorado co  
Old Virginia, gold and silver  
Olympia Mining Company  
Olympia, gold and silver  
Oriental and Occidental Consolidated, g & s  
Othello, gold and silver  
Old Emmett, g & s  
Old Antrim, g & s  
Original Savage, g, s, & c  
Ochen Mill & S M Co.  
Oxford, gold.  
Ottawa, g & s  
Peck & Rowell Mining Company  
Plumas Mining Company  
Potosi Chica, s  
Peck, gold and silver  
Pe'u Mining Company  
Pine Bush, g & s  
Passaic, g & s  
Pond, Consolidated, g & s  
Prairie, g & s  
Pactolus, g & s  
Peruvian, g & s  
Pine Bush, silver  
Preb e, g & s  
Pennsylvania, g and s, Silver Mountain  
Phoenix, silver, Arizona  
Peoria, g and s, Amador co  
Peacock mining co, El Dorado co  
Phoebe, g and s, Amador co  
Progress, silver, Reese River  
Palmetto, g and s, Coso dis  
Pioneer, copper, Contra Costa co  
Pacific Copper mining co, Del Norte co  
Proserpine, g and s, Weaver dis  
Puritan, g and s, Devil's Gate  
Pennsylvania mining co, Bear River dis  
Patten, g and s, Humboldt co  
Prima Donna, g and s, Amador co  
Potsdam Con. mining co, St Mary's d, N T  
Pioneer Mill and mining co, Nevada Ter  
Panama Con. g and s, Smoky Valley dis  
Pyroide Union, gold, Contra Costa co  
Pacific, g and s, Lander co  
Pescalama mining co  
Princess, g and s, El Dorado Canon  
Pilgrim mining co, Esmeralda  
Parker Tunnel g and s, Esmeralda  
Platina, g and s, Lyon co  
Phoenix, g and s, Calaveras co  
Paradise, g and s, Humboldt co  
Prima Donna, g and s, Devil's Gate  
Perseverance, copper, El Dorado co  
Quartz Mountain, g and s, El Dorado co  
Queen of Sheba, g and s, Washoe Valley  
Rialto Con, g and s, Silver Mountain dis  
Rose, g and s, Amador co  
Rockwell, g and s, Ravenswood dis  
Rosario and Carmen mg co, Sinaloa, Kex  
Richard Hall, g and s, Lander co  
Rothschild, g and s, Sierra dis  
Rising Sun, g and s, Reese River  
Rosario, g and s, Sinaloa, Mexico  
Riverside Quartz mining co, Tuolumne co  
Ross, g and s, Humboldt co  
Reese River Ophir co  
Rich and Rare Con. g and s, Esmeralda  
Rocky Bar, g and s, Esmeralda  
Rosario, g and s, Lyon co  
St Charles, g and s, Silver Mountain dis  
Sonoma, g and s, Lander co  
Scandinavian, g and s, Silver Mountain  
Sheba Cent, g and s, Humboldt co  
Santa Rita mining co, Sinaloa, Mexico  
Star of the West, g and s, Amador co  
Savage No. 2, g and s, Virginia dis  
Santa Clara Tun and M co, Esmeralda  
Silver Prize, g and s, Silver Mountain dis  
Silver Creek, g and s, Silver Mountain dis  
S Valley Forge g and s, Lander co  
San Francisco Bay co, San Francisco  
San Antonio Chiquito, silver, Chihuahua  
San Gabriel, gold and silver, La Paz dis  
Shrader, g and s, Russ dis  
Sophia, g and s, Bald Mountain  
San Francis, Argentine dis  
Southern Light, g and s, Reese River  
Sir Edmond, g and s, Devil's Gate dis  
Shay, g and s, Devil's Gate dis  
Spartan, g and s, Humb. ld co  
St Andrews, g and s, Lyon co  
San Francisco mining co, O Carmen Island  
Seneca mining co, Virginia dis  
Sierra Valley, g and s, Plumes co  
San Patricio mining co, Carmen Island  
Suerto, copper, Carmen Island  
San Fernando Qtz Mill & M co. Slate Range  
Sutter Creek, g and s, Amador co  
St Charles, g and s, Reese River  
Salamander, g and s, Coso dis  
Star of Hope g and s, Silver Mountain  
Spring Lode, g and s, Esmeralda  
Silver Butte Con, silver  
Santa Barbara, g and s, Los Angeles co  
Seneca, gold and silver, Esmeralda  
St John, gold and silver, Humboldt district  
Smith O'Brien, gold and silver, Lyon county  
Southwest Con, g and s, Colorado district  
Sigel, gold and s lver, Calaveras co  
South Genessee mining co, Lyon county  
San Juan co. Humboldt county  
San Bernardino, g and s, San Bernardino co  
Sebastopol, Silver City dis  
South Chihuahua, g and s, Esmeralda  
South Sacramento, gold and silv, Cedar Hill  
St Mary's, gold and silver  
Star, gold and silver, Lyon county  
San Francisco, g and s, Calaveras co  
Sierra Madre, g and s  
Santa Cruz Petroleum Oil M co  
Spencer, g and s, Humboldt co  
Sarah Frances, g and s, Cal. and Nevada  
Santa Clara Coal co  
St John, Coal co, Cal. and Nevada  
Dalliba, 604 Montgomery st.  
San Pablo, gold and silver.  
San Francisco Tunnel & Mining Company.  
Sierra Nevada Gold Quartz Mining Co.  
Seely, gold and silver.  
San Antonio, Mining Company.  
Scottish Chief, gold and silver.  
Setting Sun, gold and silver.  
Summer, gold and silver.  
Sunny Italy, gold and silver.  
St. Francis, gold and silver.  
Silver Circle Mining Company.  
Silver Moon, gold and silver.  
San Dimas, gold and silver.  
Selleck, copper.  
Santa Barbara, gold, silver and copper.  
San Mateo, Coal and Plaster.  
South Locomotive, gold and silver.  
San Marcial, gold and silver.  
Stanislaus, copper.  
Sacramento, gold and silver, Humboldt Co.  
Star of Empire, gold and silver, Marip'a Co.  
Tutawah Tunnel Company.  
Tilly Tunnel and Mining Company.  
Tajo, gold and silver.  
Tecoripa Mining Company.  
Terra del Fuego, gold and silver.  
Thunderer Ledge, gold and silver.  
Tam O'Shanter, gold and silver, Esmeralda.  
Tellurium, gold and silver, Amador Co.  
Thompson, gold and silver, Silver Mountain.  
Teutonia, gold and silver, Gold Hill.  
Tritia, silver, Sonora, Mexico.  
Tip Top, gold and silver, Silver Mount' Dist.  
Toronto, gold and silver, Devil's Gate Dist.  
Tonawanda, gold and silver, Colorado Dist.  
Telegraph, gold and silver, Excelsior Di-trict.  
Thompsons, gold and silver, Simpson's Park.  
Tecolota, silver, Durango, Mexico.  
Tennessee, gold and silver, Echo District.  
Twilight Tunnel Mining Co., Gold Hill.  
Tallulah Mining Company, Humboldt Co.  
Tennessee, gold and silver, Coso District.  
Torrid Zone Con., copper, Amador Co.  
Union of States, gold & sil'r, Santa Clara dis.  
Union Thirty Four copper Amador Co.  
Empire, gold and silver, Humboldt County.  
United, copper, g and s, Contra Costa Co.  
Upper Lander, gold and silver.  
Vivian, gold and silver.  
Vesuvian, gold and silver.

Valparaiso, gold.  
Valle, gold and silver, Gold Hill.  
Virginia Mining Company, Carson Hill.  
Vesta, Mining Company Lander Co.  
Viejo, g and s, Lynn County, N. M.  
Webster Mining Company.  
Wisconsin Tunnel Company.  
Webster, gold and silver.  
Whitman, gold and silver.  
Weehawken Mining Company.  
Weaver, copper and silver.  
Walrath Tunnel and Mining Company.  
West Point Blue Mountain Mining Co.  
Wangaman Mining Company  
Willamette, gold and silver  
Young America S F M Co.  
Washington, g and s, Lander Co.  
Wisconsin, g and s Silver Mountain Dist.  
Waukasig, g and s Inyo District.  
Washington, g and s, Amador county.  
Winona, g and s, Esmeralda  
Wide West, g and s, Devil's Gate  
West End, g and s, Amador co  
Whiting, g and s, Devil's Gate  
Waitt Con., g and s, El Dorado Canon  
Wilson, g and s, Echo dis  
Wallace, g and s, Indian Valley dis  
Washoe Val Mam M Co, Smoky Valley  
Winnemuck, g and c, Amador co  
Woolsey, g and s, Gold Hill  
Young America, g and s, San Francisco co  
Yuba, g and s, Yuba  
Ypsilanti, gold and silver.  
Young Antrim, gold and silver.  
Zarita, g and s, Virginia dis  
Zouave, g and s, Reese River

MR. EDITOR.—I see in your number of last week a notice that "the editor is absent," and in the same column, (page 4,) a letter from your correspondent "P." which implies that others, also, are at times "absent." I think that your proof reader must be answerable for the assertions in reference to No 2 and No 4 Sulphide of Ammonium and Chromate of Potash, although not commonly used as reagents for silver will produce the effects spoken of, but the absence of a precipitate with nitrate of silver is the test for chloride of potash as to its freedom from chloride. Some statements however of the properties of hydrochloric acid seems, to imply "absence" elsewhere.

A. POOR CHEMIST.

"A Poor Chemist" is correct in his surmises, and we owe our correspondent "P." an apology for the errors which we unintentionally allowed to creep into his communication.

DRY CRUSHING.—Messrs. Hotelling & Wheeler have recently invented and put in practical operation, at the Miners' Foundry, in this city, a battery of four stamps, designed for dry crushing. The battery, though quite a light one, is capable of reducing to an almost impalpable powder about four tons in twenty-four hours. We have neither room nor leisure this week to give this new improvement the description and notice which its importance demands. We shall endeavor to do full justice to it in our next issue.

OUR TRIP TO COPPEROPOLIS.—We have been so incessantly employed, since returning from Copperopolis, in preparing our enlarged Mining List, that we have had no time, whatever, to write out the notes taken on that trip. We shall endeavor to commence their publication, however, in our next issue.

An ingenious fellow is selling photographs of postage stamp size, with gummed backs, to be used as *prima facie* evidence of ownership when applied to "portable property."

Excellent clay for fire bricks, crucibles, and crockery, has been found in mining tunnels near Gold Hill, and a pottery has been established at Virginia.

NEW COPPER DISCOVERIES.—Rich discoveries of copper have been made near Cloverdale, in Sonoma county, and a new mining district formed. We were shown specimens of ore on Saturday which show indications of having been taken from a permanent ledge; the copper appears of very fine quality.

One firm of hardwaremen in Virginia have paid \$37,386 freight on 946,376 lb, hauled in wagons from Sacramento, at a price of about four cents per lb.



# GEO. W. CHAPIN & CO. EMPLOYMENT OFFICE

—AND—

## REAL ESTATE AGENCY,

Furnish Employment for, and supply all kinds of Male and Female Help for MINES, SHOPS, RANCHES, HOTELS, FAMILIES, Etc., Etc. Also with the above give attention to

## BUYING AND SELLING MINING STOCKS,

Of every description, from

Washoe,  
Mexico,

Humboldt,  
Colorado,

Esmeralda,  
Slate Range,

Reese River,  
Owens River.

Office, Lower Side Plaza, Near Clay Street,  
SAN FRANCISCO.

### OUR LIST OF MINING COMPANIES.

We have devoted nearly our entire issue this week, to our enlarged list of Incorporated Mining Companies. In order to make room for it we have been obliged to issue a "supplement" of four pages. The list, in its first issue must, of course, be quite imperfect; we shall take especial pains, however, to render it as correct as possible for our next issue. To this end we earnestly call for the co-operation of all parties interested. We shall endeavor, as far as possible, to wait upon them individually during the present week, and receive such corrections, as may be needed directly from their hands. Those Secretaries who may be personally interested in any needed corrections, and who may not be waited upon by Thursday or Friday, will confer a favor on us by handing in their corrections at the office, or forward them through the Post Office to our address.

We are fully aware of the importance of the publication of a full and correct list of Incorporated Mining Companies in the State and especially of those having offices in this city, and we shall endeavor to meet this want to the best of our ability. We hope by next week, or the week after, at the farthest, to be able to furnish our readers and the public with a list sufficiently complete and correct to warrant its transmission to friends at the East as an ocular demonstration of the extent and progress of the mining interests in the State. The issue giving the complete list will contain some appropriate remarks with regard to the character, importance and value of progressive and non dividend paying mines.

**RICH.**—We saw, on Saturday last, the tangible evidence of a very rich strike in the Rising Sun claim, Buena Vista District, Humboldt. This ledge is located about three miles from Fall's Mill, and bids fair to develop a valuable mine.

Rumor says that Joseph Trench intends to build a large theatre in Virginia, and to employ Charles Pope as Manager.

### Washoe Correspondence.

The following is an extract from a private letter dated Silver City, July 22, 1863, which has been placed in our hands for publication:

According to promise, I continue my correspondence, and without further statement of personal matters than I gave you in my last, I will give, as near as I can, a clear idea of the state of things in the Devil's Gate Mining District, as I know you are anxious to receive information upon which you do me the honor to say "you can rely." I made a somewhat longer trip through the mines of this district than I had first intended to do. There is no diminution in the flourishing prospects of Nevada Territory, if I am to judge by the enterprise that actuates the community of gold seekers at and about Dayton and Silver City. More mills continue to arrive and more machinery for newly developed mines, especially for Palmyra District. This newly discovered district has, within the last few months, made rapid progress. Many of the ledges have proven far more valuable than any had supposed or even expected. Large capitalists, I find, are daily investing large sums in this district, by purchase into various claims. Spring Valley has some very rich mines, upon which work is continued night and day. As you are aware this valley was prospected three or four years ago, although little was accomplished until last year, when many old claims were relocated, and, up to the present time, new discoveries have been made that have astonished even the owners of the oldest and richest claims, who originally have purchased from \$100 to \$500 per foot.

It is the impression, as you are aware, with many men that a claim is not worth buying unless it is held at large figures. But men of capital here have given the lie to this presumption by immense investments here. Here is located the justly celebrated Daney mine,

If I owned but a few feet in it a competence would be insured to me. They have a fine mill now running. Its erection cost them \$60,000; in three weeks running thereafter they cleaned up the neat sum of \$63,000—a paying investment that, was it not? That gave an impetus to mining operations, and a multitude of tunnels were run. Many have struck it very rich, with rock paying from \$50 to \$300 per ton.

### THE JEWELL COMPANY.

And here I may mention the Jewell Company, located near the Daney, and promising to be equally if not more valuable. In many things it possesses superior advantages over the latter company. Last week a committee from the Board of Trustees of the Jewell Company visited their mine. I had the pleasure of an introduction to these gentlemen, and with them visited their location. They have purchased a mill site from Mr. Seares, of Carson, City, and have advertised for bids to erect a fifteen stamp mill thereon. They have also let a contract for running their tunnel. The mill is to be like that of the Daney Company, which has proved to be an excellent one. This claim is on the Daney ledge, and prospects equally as well, if not better. One ton of the rock is to be shipped to your city in a few days for reduction and test. The proprietors of the Daney speak in the highest terms of their little neighbor, the Jewell, for it is a small company now, but bids fair to excel its larger companion. The rock already taken out is from a ninety foot shaft, and will pay over \$200 per ton. They have already commenced the tunnel so it shall strike the ledge two or three hundred feet deep. I believe the stock is all owned in San Francisco, except some seventy-five feet, and now held at from \$40 to \$50 per share. After an examination of this mine I am satisfied it is not one quarter its true value, and this I find is the opinion of its big neighbor, the Daney people. Old hands working on the Daney have been unable to tell Jewell rock from their own when placed side by side. The company have also located three hundred feet on each side, their tunnel covering several ledges

through which they have to pass. I speak thus explicitly of this company as they are to be considered next in reputation to the Daney, and because they show every evidence of the truth of what I tell you, and will, I believe, verify my words. I forgot to state that this proposed Jewell tunnel runs through the Tennessee ledge, which you remember my telling you was bought up by some parties who knew its value, for \$95,000.

The Hawley Co. deserve notice also; they are situated near the Jewell, and are daily rising in favor here. They have a fine engine on the ground, which they put there at a cost of \$7,000. There are others I propose to give you a statement of, such as the Mineral Hill, Chrystal Palace, Mount Hope, etc. Rest assured, however, that a few months will prove this district of which I have here written to contain some of the wealthiest mines in the Territory. We have a new town laid out, Geneva by name, distant about one and a half miles from Silver City and three from Dayton. Ten or fifteen houses are already erected, and more begun. However, for further statement, you must await my next, and meanwhile believe that I have made these notices of these claims from actual observation, and am confident that I have not even given you half as glowing an account of our mines here as they really deserve, or will prove themselves worthy of.

Yours Truly, L. D. S.

A silver lode has been discovered near Indian Diggings, El Dorado county.

Several copper companies at Fairplay, El Dorado county, are taking out ore for shipment.

The Virginia Enterprise is in favor of Washoe as a name for the Silver State. It is much better than that confounding, confusing, and unoriginal name of Nevada.

A brick-yard near Virginia has capacity to make 14,000 bricks daily. The price is \$17 per 1,000.

There is some talk about establishing a large private cemetery near Virginia.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, AUGUST 17, 1863. NO. 42.

#### COPPER DISCOVERIES IN CALIFORNIA.

Copper was discovered in the southern portion of this state very soon after the first influx of gold seekers to the Pacific Coast. Rich mines of this metal were found to exist at various points to the East of Fort Yuma, in Arizona Territory, and also to the North, along the Valley of the Colorado. Some attempts were made, at an early day, to work the mines in Arizona, but with little success in consequence of Indian troubles, the difficulties and expense of transportation and the high price of labor. We are not aware that any further attempts have been made, since that time, to work those mines. Recent intelligence from the Colorado, however, warrants the belief that the copper interest of that region will soon grow into considerable importance.

Copper was also discovered in Hope Valley, on the Eastern slope of the Sierra, not far from the Placerville and Carson Valley road, if our memory serves us correctly, as early as 1855. We have now in our possession a very rich specimen of "peacock ore," taken from the "Uncle Billy Rogers Lead," and placed in our hands in 1856. We are not aware that any considerable amount of work was done in this vein until the present year, when it was re-located, and regular mining operations commenced upon it, in a small way.

#### COPPER DISCOVERIES IN CALAVERAS COUNTY.

In the year 1855, Mr. J. W. Bean, of Copperopolis, who was residing some three miles north of the present Napoleon copper mine, picked up some specimens of what was no doubt carbonate of copper, from a ravine near his cabin. He took them home, and on showing them to his partner, was greeted with the remark that "they were nothing but copperas rocks, the country is full of the stuff, and it isn't worth a d—n." Mr. B. threw his specimens out of the door, among some rubbish, and by that act parted with indications, which, had they been followed up intelligently, would have led him to a fortune, and placed the State of California five years in advance where she now is in her great interest of copper mining. Early in 1860, Mr. Hiram Hughes, who had been for some years residing in the same neighborhood with Mr. Bean, was attacked with the "Washoe fever," and joined in the general rush, which took place in that direction in the Spring of 1860, as soon as he arrived in the neighborhood of Virginia City he was so struck with the great similarity of the appearance of the country there, with that where he had been so long living, along the foot hills of Calaveras county, that he made all possible haste back and commenced prospecting for silver. He soon located for silver and copper, what is now known as the first discovered copper mine in Calaveras county, situated on Quail Hill, No 1, about three miles north-east of the Napoleon mine, and some six or eight to the westward of Copperopolis.

We had intended to have visited this locality during our recent trip to Copperopolis, but want of time prevented. We hope to do so, however, at an early day. We understand that the locality is one of peculiar geological interest, quite dissimilar from the surrounding country, generally, and giv-

ing most unmistakable evidence of recent, intense plutonic action. Mr. Hughes is working his mine for gold and copper. The copper, we understand, lies in an intermediate strata, between two others which carry gold, with silver also to a considerable extent. The working for gold is carried on in the rainy season only, when water can be had for working—the free gold being thus taken out and the "tailings" carefully preserved for future reduction, by machinery. About 300 tons of copper have been taken from the mine and shipped, chiefly carbonates, which have assayed an average of 25 per cent.

Mr. Hughes was also the discoverer of the now famous Napoleon mine, eleven eighteenths of which he sold for the sum of \$22,000. We shall hereafter have occasion to speak more fully of this mine.

The discovery of copper on Quail Hill soon became noised abroad, and parties from this city went up to enquire into it. Prospectors were very soon out in various directions, hunting for "indications."

Early in the summer of 1860, Mr. R. B. Reed, having examined the ore at Hughes mine, started out on a prospecting trip, in an Easterly direction from Hughes'. While passing through a long narrow valley, about eight miles distant from his starting point—a locality with which he had been long acquainted—he observed some croppings, which on close inspection, he felt sure were of the same character as those on Quail Hill. He gathered up some specimens, and retraced his steps, about four miles, to McCarty's cabin, a well known stage stand on the Stockton road, where he submitted them to Dr. Blatchly, of this city, who had recently been attracted to that place by the fame of Hughes's discovery. The Doctor being something of a mineralogist, at once pronounced the specimens copper of most flattering indications.

Read, McCarty and Blatchly started out early next morning, and located and staked off for themselves and friends all the ground now embraced in the Union, Keystone, Consolidated, Empire and Calaveras claims—11,250 feet. A large number of sacks were filled with the croppings of carbonates, which were gathered from the surface. The first work was done by Dr. Blatchly, at what is now known as the Discovery shaft, upon the Keystone mine. The Doctor obtained good shipping ore at a depth of 25 feet. Mr. Reed soon afterwards commenced work upon what is now the Union Company's ground, and obtained good ore at about the same depth with the Doctor. The first ore shipped from this mine assayed, in this city, 30 per cent. It may be a matter of curious interest to some to state that the first work ever done on this mine was the sinking of a small prospect hole, three or four feet deep, by Mr. McCarty, somewhere about 1852. This small excavation may still be seen a few feet to the west of the Keystone Company's office. The opening was made in search of gold, but without success. The prospector however, has since been rewarded by a most ample fortune made out of the same ground, but from a mineral of another character. It may be recorded as a matter of some what unusual occurrence, that all the parties directly engaged in these early

and valuable discoveries held on their ground long enough to become independently rich. In our next issue we shall give some account of the progress which has been made in the development of these mines.

#### OUR MINING STOCK COMPANIES LIST.

We hope to be able to place before our readers, in our next issue, a full and corrected List of the Mining Stock Companies having offices in this city, and, to a large extent, located in other parts of the Pacific coast. We have already corrected a great number of errors in our last, and made many additions. We have devoted to this work almost the entire labor of three men during the past week, and we yet find much to do. A more general co-operation of Mining Secretaries, would greatly facilitate the work. While we cheerfully acknowledge the generous and willing aid of some, we regret to say that there are others who appear to take but little interest in a work which is of such evident importance to the entire mining community. We trust that all such, after our next issue, will realize the importance of the work, and hereafter lend a more willing hand in aid of our efforts in this direction.

Single copies of the issue containing the Directory, will be furnished gratis to all of our regular subscribers, and additional copies will be supplied to such at the regular subscription price. Twenty-five cents per copy will be required of non-subscribers, for that issue. Persons interested in the development of the mineral resources of California, can do much in aid of that work, by purchasing and forwarding to their correspondents, at the East the index of this recent mineral developments of the Pacific coast. The record shows an extent of operations and evidence of mineral wealth truly calculated to arrest and fix the attention of capitalists in the Eastern States and Europe. We shall send the proposed issue to the leading banker at the East and to all other prominent capitalists whose address may be at hand.

OUR "MINERS' LABORATORY."—In our articles on "Silver" in our "Miners' Laboratory," we do not purpose to confine ourselves to what are strictly called silver ores, but intend to place before our readers, all the minerals containing silver whether they are copper, arsenical nickel, cobalt, or antimonial ores.

It is also our purpose, after fully describing the ores, to place before our readers all the different processes employed in extracting the valuable metals, in various parts of the world, carefully and minutely detailed, and also, so far as we can arrive at them, all the Specifications of Patents, issued for such purposes in the United States and Europe.

THE Horn's Gold and Silver Mining Company, Mariposa county, are sinking three shafts on their vein, and at a depth of 28 feet are taking out decomposed quartz thickly studded with gold; together with arsenourated Sulphurets, very rich. The Messrs. Goddard & Co. have nearly completed a mill, for the company, of 20 stamps, with an engine of 50 horse-

power



## TABLE MOUNTAIN COPPER MINING COMPANY.

A large pile of sacks, containing copper ore, may be seen upon Montgomery Street, in front of No. 528, which has recently been received from the Table Mountain Copper Mining Company's Claim, located some three or four miles to the southward of Copperopolis. The claim was located about two years ago, since which time considerable work has been done, but with no important results, until about three weeks since, when a well defined lead of sulphurets was struck, narrow at the top, but gradually widening out, until it is now about two feet wide, with both walls well defined. Our correspondent considers this development one of the best outside of the Union claim. This claim, we believe, has generally been considered as on the same lead with the Keystone, Union, etc., and the appearance of the ore as seen upon Montgomery street, would seem to indicate that such is the fact—the general characteristics being similar and quite distinctly marked.

We understand that work is being prosecuted upon this claim with vigor, night and day shifts being employed. This, we believe, is the 5th claim in that locality which is now making regular shipments of ore, viz.: the Union, Keystone, Napoleon, Hughes and Table Mountain. The Calaveras Company has shipped considerable ore the past season, but operations on that mine have been suspended for the present.

Regular shipments will hereafter be made by the Table Mountain Company. That just received consisted of five tons, all taken from the main shaft, which is still going down. A drift is just being started, from which, and the shaft, the workmen will soon be able to take from three to five tons per day—increasing, gradually, from that amount, as the mine is more fully opened. The ore speaks for itself, and taken in connection with the above facts with regard to the mine, warrants us in pronouncing this one of the most important copper developments in that interesting region. The Company is incorporated, Mr. M. G. Elmore, at 528 Montgomery street, being its Secretary.

## VIRGINIA CITY.

The Editor of the "Spirit of the Times," in an editorial letter from "Silverland," speaks quite glowingly, yet truthfully, of the growth and prospects of Virginia City. We make the following extracts:—

The city of Virginia is the second city (in all those attributes which go to make up a great commercial and business emporium) on the Pacific Coast. \* \* \* Virginia has a growth of little over three years, and her record to-day is a history of itself. Her population is nearly double that of Sacramento; is double that of Portland, Oregon; is four times as great as that of Stockton or Marysville. Taking in the population of Gold Hill, which stands in the same position to Virginia that Mission Dolores does to San Francisco, and we have at least TWENTY THOUSAND inhabitants, and were the officers who take the census strict in the performance of their duty, I believe the number would be increased rather than diminished. \* \*

Last year the taxable property of Virginia was in the neighborhood of \$8,000,000—this year, the Tax Collector informs me, it will border close on to \$11,000,000, nearly double the amount. The assessment on this is \$2.72 on the \$100, of which thirty cents goes for school purposes, eighty cents for Territorial purposes, and the balance goes to meet the requirements of the county. This will give some little evidence of the wealth, rapid growth and stability of Virginia. \* \* \* The amount of business done in Virginia is positively immense and astonishing; it never ceases and seems to grow by what it feeds on. In extent, value and constancy, it is more like a city of ten times its age and population. It is remarkable in all the phases it presents, and is another high (!) and enduring monument to the energy and enterprise of the American people. The completion of the Central Railroad to this Territory will make Virginia a gigantic inland metropolis, and, independent of that which I have already seen, I believe that in five years from the present writing, by means of its own natural growth, it will be a city of forty or fifty thousand inhabitants.

The New York Post contains a list of 26 Banks organized under the National Banking law, with an aggregate capital of about \$3,500,000.

## CALIFORNIA COPPER SMELTING WORKS.

EDITOR MINING & SCIENTIFIC PRESS.—SIR:—In your number of the 21st. inst., you were kind enough to give a notice of the "California Copper Smelting Works." Your remarks are correct in the main, and I take pleasure in giving you the subjoined further details which may be interesting to your readers.

The following are the rates and terms on which the Company are now purchasing ores:

Ores assaying from 8 to 11 per cent. are purchased at the rate of \$2 per each per cent.

Ores assaying 12 per cent. at \$25.00 per ton.	
" " 13 " " " 27.25 " "	
" " 14 " " " 30.00 " "	
" " 15 " " " 32.50 " "	

A ton is received at 2,376 lb., to be delivered at the Company's works at Antioch. Shipments may be made in bags or in bulk. If in bags, they will be returned. The land and water freight will be advanced by the Company, on the delivery of ores at the works, and payment made as soon as a satisfactory assay shall have been obtained.

The California Smelting Works propose to buy their ores upon a different scale from that applied by other purchasers in this city. When ores are shipped East or to Europe, the net assay is taken, but from one to two per cent. is deducted and upon that produce the advance is made, and not upon the real per cent. as contained in the ore; but the California Smelting Company propose to buy upon the true amount in the ore. To illustrate:—From ore that will assay, say 14 per cent., any other parties here advancing, would deduct one and a quarter per cent. at least, and call it 12¾.

The Company will not confine itself to the purchase of ores of low assay. Contracts will be made for all the ores a mine may produce, and the higher the assay, the greater will be the price per cent.; but it is obviously to the advantage of copper miners to sell their inferior ores to the Smelting Works, since they cannot be profitably shipped to a foreign market; and the expense of concentration and the loss of metal attending on that process, will counterbalance any advantage obtained in economy of transportation, when concentrated.

Additional furnaces will be built, and due capacity of the works will be made to keep pace with the supply of ores.

Your obt. ser't.,

RALPH EMERSON,  
Secretary.

THE RECENT RICH "STRIKE" OF THE OPHIR COMPANY.—We learn from the Territorial *Enterprise*, through the Superintendent of the Ophir mine that since the discovery of the rich vein on the surface, back of the incline, some ten days ago, he has sacked and shipped to this city, about 5 tons of choice ore daily. The largest day's work was 15 tons. The most of the stuff thus far has been valued at \$2,500 a ton, but some of it went infinitely higher than that; another class will pay \$1,500; and still another \$3,000. Over 60 tons of it, altogether, have been shipped since the discovery of the vein. The lead was stripped still further yesterday, and hereafter the daily yield will be considerably over 5 tons. Within the past few days another vein has been found, some 20 feet further west, the ore from which assays \$405 per ton.

THE EBB TIDE.—The travel from and to the Washoe and adjacent country is becoming equalized. The flow back upon us is steadily increasing.

THE "CLAIMS" OF REESE RIVER.—According to the Reese River *Reville* of August 1st., there were, at that date, located and recorded in that mining district (Reese river) about 1,300 different company claims. Nearly half are separate ledged. Mount Hope has about 75 companies; Ravenswood, 85; Simpson's Park, 230; Big Creek, 350; Smoky, 300; Summit, 100; Sante Fe, 60; Grass Valley, 15; Union, 20; Cortez unknown.

AUSTRALIAN GOLD MINES.—The gold mines of Australia have been gradually declining for the past five or six years. Their average for the past twelve years is set down at \$41,000,000. These mines have gradually declined from their highest yield of about \$75,000,000 to a probable present yield of not far from \$25,000,000.

HUMBOLDT MINES.—The great riches of this mining district is well known, and little need be said of it. We have facts in abundance, to substantiate this, from persons of undoubted veracity. Yet there seems to be a strong tendency, among the miners and people generally to content themselves with prospecting and hunting up "big things," instead of proceeding vigorously with developments. This is an evil that must be overcome. The mills are said to be comparatively idle owing to this rush for new discoveries. A great lack of energy is apparent. People seem to be acting upon the impression that selling a silver mine is a more expeditious mode of acquiring wealth than working it, and accordingly the great anxiety seems to be to discover and "fix up" new leads for the San Francisco capitalists.

There is no question but scores of mines have been opened in that region, which will eventually be proven to be very rich. As it is, however, the hills and ravines are everywhere dotted with mere prospect holes, with here and there a few hundred pounds of rock brought to the surface, where, instead the beholder should see large piles of ore at the mouths of the tunnels and shafts, all ready for transportation to the mill. True, much of the ore found in this district cannot be worked by the ordinary silver process, still there is an abundance of ore there, or we are very erroneously informed, which can be worked—amply sufficient to afford the fullest employment of the idle mills which have been erected there.

If miners would advance their true interests, they should endeavor to develop their "feet," rather than to add, indefinitely, where thousands already exist.

The local papers and correspondents of that region all agree in the above representations of facts. Let the miners of Humboldt delve into their hills with tunnels and shafts, and they know how to do—let them bring to the light those minerals as they can do—let them haul it to their idle mills, and take out from the ore the gold and silver bricks as they should do, and, our word for it, they will soon place the Humboldt mines in the front rank of mining localities on the Pacific Coast. By so doing they will not only greatly advance their own interests, but add immensely to the productive wealth of the coast. A hundred feet fairly developed are worth the sands unimproved. A thousand dollars spent in developing a good mine is worth many thousands, scattered over an entire district, with no developments to prove its value.

Much confusion is often created by the use of the terms right and left banks of the river. Scientific writers use the term in reference to the position of a person descending the river. This technical sense of the term is now well settled among geographical societies and scientific travelers. This has been found the only way to give it any definite meaning. Right turn and wind so that nothing definite can be made out to east, west, north and south banks. Travelers go up stream and back again so irregularly, that none can know which bank is on their right hand or left at any particular time, unless they tell us, every time they use the word, which way they are going.

SUBSCRIBE.—Are you a miner and not a subscriber to the MINING AND SCIENTIFIC PRESS? If so, you are an analyzer of many times the price of a year's subscription, particularly if you are engaged in quartz mining. The amount of practical information, important to miners and mechanics, which is contained in a volume of the PRESS, is not bought from the shelves of any bookstore in the country for the price of several year's subscription. Do you send a paper to the "Old Folks at Home?" If so, and you desire to send important information and valuable recommendations, you can find no paper that will be read with so much eagerness by them, or one that will convey to them so full an account of the real industry of the country as the MINING AND SCIENTIFIC PRESS. We invite all to send us their names and four dollars, or two dollars for six months, and become patrons of the only mining paper printed on the Pacific coast. Those who receive a paper with this paragraph marked may understand that it is sent to them for examination, and with the hope that it may so far meet with their approval as to warrant their subscribing for it at once. It is not our usual custom to receive a subscriber for less than six months; but inasmuch as we are anxious to introduce the paper where it is not now known, we will, for the present, send the PRESS for three months even, on the receipt of one dollar, in coin or stamps. It is our belief that no one will wish to discontinue the paper after being a constant reader of it for even that short period.



# MINING AND SCIENTIFIC PRESS.

We append the following list of companies, which are known to us by name only. The locations of office and names of the Secretaries are not known to us. We will add those names and place them in our regular mining list, whenever attained.

Lyon, g & S, Big Creek District.  
Lad, g & s, Smokey Valley district  
Pollo, g & s, Reese River district.  
Lambra Hill, g & s, Summit district.  
Lh, g & s, Silver Mountain district.  
Lanta, g & s, Devils Gate district.  
La Nueva, silver, Humboldt county  
Lone Copper Co., Contra Costa county  
Leland Co., silver, Colorado, N T  
Luche Chief Mining, Co. Arizona  
Liquarian, g & S, Smokey Valley  
Lutville Quartz Mining Company, Calav. Co  
Lor, gold and silver, Lander county.  
Lanta, gold and silver, Lander county  
Linal, gold and silver, Humboldt county  
Lstin, gold and silver, Reese River district  
Lany, gold and silver, Devils Gate district  
Lantic, gold and silver Contra Costa coun.  
Lerson, copper, Contra Costa county  
Laculution, gold and silver, Colorado distr  
Laker Hill, gold and silver, Lander City  
Lor, gold and silver, Silver Mountain  
L Giant, gold and silver, Lander county  
Ltimore, gold and silver, Silver Mountain  
Lack Ledge, gold and silver, Reese River  
Lnat, gold and silver, Devils Gate  
Ljamin, gold and silver, Devils Gate  
L Run, copper, Amador county  
L Mountain Peak, g & s, Calaveras co  
Ls, gold and silver, Coso district  
L Eagle, gold, Nevada county  
Lker Hill, gold and silver, Reese River  
Lown, gold and silver, Amador county  
L & Baldwin Tun and M Co, Esmeralda,  
Ldie Mammoth Tun Co, Bodie district.  
L City, gold and silver, Clayton district.  
L Jacket, gold and silver, Devil's G Dis.  
L Dragon M Co, State of California.  
Lard & Seavy, g and s, Reese River Dist.  
L Mountain, g and s, Tuolumne County  
L California, gold and silver, Lower Cal.  
L Franklin, silver and copper, Mt. Diablo.  
Lker, copper, Whiskey Diggings.  
Lner, g and s, Humboldt Co. N T  
Laveras, silver, Silver Mountain district  
Lstock, gold and silver, Alpine d, Am C.  
Lra, gold and silver, Inyo district.  
Lbitola, gold and silver Uvas district.  
Lquette, g, s and cop, Clayton district  
Lressey, g and s, Palmyra district  
Lronena Mining Co. Sonora, Mexico  
Laparcil Hill, M Co. Calaveras Co.  
Loper Hill M Co. Del Norte County.  
Lar Creek, silver, Humboldt County, N T  
Lifornia, g and s, Humboldt County, N T  
Lar, c, g and s, La Paz district  
Lonilla, g and s, Sonora, Mexico  
Lton, gold and silver, Virginia district  
Lcroye, gold and silver, Virginia district  
L street, c and s, Red Mountain, N T  
Lollar Mining Co. Yuba County  
Lopatra, g and s, Lander Co.  
Lopolitan, copper, Calaveras County  
Lupbell, g and s, Gold Hill  
Lrus Mining Co. Contra Costa County  
Lpauzingo, Guerrero, Mexico  
Lper Age, g and s, Contra Costa County.  
Lumbus, g and s, Reese River  
Lson Hill, g and s, Calaveras County.  
Lsonora, silver and copper, Mount Diablo  
Lstitution, silver and copper, Mt. Diablo  
Ldonia, coal, San Mateo County  
Lstock, g and s, Lower California  
Lina, gold and s, Blue Mountain district  
Lyn Farm Quarry, Devil's Gate district  
Lna, gold and silver, Reese River  
L Juan, gold and silver, Esmeralda  
Lrd, gold and silver, Lyon County  
Ldas, gold and silver, Devil's Gate  
Lance, gold and silver, Gold Hill  
Llina, copper, Sonora, Mexico  
Lster Mining Co. Silver Butte district  
Lmond, gold and silver, Reese River  
L Norte Comstock Co. Del Norte Co  
Loque, gold and silver, Galena district  
Lphesno, gold and silver, Sacramento Co  
Lglas, gold and silver, Lander Co  
Lorado, gold and silver, Silver mtn dis.  
Lorado, Con. g and s, Devil's Gate dis  
LAlamo de San Antonio, S Antonio, L C  
Laste, silver, Sonora, Mexico  
Lone L Sullivan Mg co, San Francisco co

Elery, silver, Smokey Valley  
Felipe Tunnel co Humboldt co  
East Range, g and s, Humboldt co  
Express Mining co, Russ district  
Lureka and Elizabeth Con. s and c, Cal. co  
Enterprise, g and s, Colorado district  
Empire Mini g and Tun. co, Humboldt co  
Emigrant No 2, g and s, Lyon co  
Eclipse Mining co, Reese River  
Flor Nightingale, gold and silver, Esmeralda  
Fairchild, c, gold and s, Spring Valley  
Forest Queen, gold and silver G Mogul dis  
420" Mining co, Virginia district  
Favorite Mining co, Virginia district  
Great Eastern, g and s, Silver Mountain  
Gov. Downey Con. g and s, Humboldt co  
G Id Bluff Mining co, Humboldt co  
Geo. Washington, g and s, Oro Fino dis  
Gen. Hill, silver, Summit district  
Great Chieftain, g and s, Lander co  
Grey Ledge, g and s, Calaveras co  
Great Con. of Esmeralda, g and s, Mono co  
Governor, g and s, San Bernardino co  
Gen. Wright, g and s, Devil's Gate district  
Golden Era, g and s, Reese River  
Great Basin Mining, Nevada Territory  
Golden Gate, copper, Contra Costa co  
Gopher, c, g and s, Calaveras co  
Garabaldi and Bolvidere Con. g, s and c  
Garratt and Grant, g and s, Esmeralda  
Great Central Mining co, Weaver dis. A T  
Hobson Con. cop. mining co, Santa Clara co  
Harris Bros. g and s, Blue Mountain  
Harriet Lane, g and s, Nevada Ter  
Hooker, g and s, Humboldt co  
Hutchinson, gold, silver and copper  
Henrietta and Sophia Mining Co. Lower Cal  
High Peak Tunnel and Mining Company.  
Humboldt Great Consols Mining Company.  
Independence, g and s, San Francisco dis  
Isabel, gold and silver, La Paz  
Illinois, gold and silver, Silver mountain dis  
Impression, gold and silver, Garden Bar dis  
Inyo, gold and silver, Inyo district  
I X L, gold and silver, Silver mountain dis  
Intrepid, gold and silver, Yuba Co.  
Ina Ledge, gold and silver, Devil's Gate dis  
Isabel and Agnes Land, g and s, Humboldt d  
Independent, gold and silver, Amador Co.  
Ida Mill and Mining Co. Owen's River  
Indian Valley, g Id and silver, Plumas Co.  
Ida gold and silver, Lower California  
J C Fremont, gold and silver, Silver Mount.  
Jura, gold and silver, Gold Hill  
Julius, gold and silver, Reese River  
Joe Lane, gold and silver, Reese River  
Jum, gold and silver, Esmeralda  
Jefferson, gold and silver, Reese River  
Janesville, gold and silver, El Dorado Co.  
Jefferson Galena, g and s, Plumas Co.  
Kohinoor, g and s, Big Creek district  
Kate Oliver, gold and silver, Argentine dis.  
Kinsman, gold and silver, Santa Clara Co.  
Kelsey, gold and silver, El Dorado Co.  
Kohler, gold and silver, Reese River  
Lake Superior, copper, Santa Clara  
Lone Star, gold and silver, Silver mountain  
Lucky Star, silver, Silver Mountain  
Lunar Consolidation, g and s, Esmeralda  
Lennox, g and s, Slug Gulch, El Dorado Co  
Los Angeles & Mexican Con. Colorado dis  
Luncook Mill and Mining Co. Storey Co.  
La Sinaloa, silver, Sinaloa, Mexico  
Leo, gold and silver, Gold Hill  
La Libertad, silver, Sinaloa, Mexico  
Lucy Ella, gold and silver, Gold Hill  
Lander Silver Ledge Co. Reese River  
Lady Bell, gold, Del Norte Co.  
Lightner, gold and silver, Reese River  
La Candelaria, silver, Lower California  
Landscape Mining Co. Contra Costa  
La Libertad, gold and silver, Lower Cal.  
La Candelaria Mining Co. Durango  
Laucha Plana, copper, Amador Co.  
Liverpool, gold and silver, Humboldt Co.  
Lake Water, Esmeralda and Bodie  
Mountain, gold and silver, Amador Co.  
Mountain, gold and silver, Silver mountain  
Manchester, gold and silver, Amador Co.  
Mountain Glen, gold and silver, Big Creek d  
Magdalena, gold and silver, Esmeralda  
Minnie Lota, gold and silver, Esmeralda  
Mineral Mountain, g and s, Calaveras Co.  
Monte Albano, gold and silver, Esmeralda.  
Mountain View, gold and silver, Calaveras  
Monitor, gold and silver, Amador Co.  
Metropolitan, gold and silver, Monterey Co.  
Mystic, gold and silver, Gold Hill  
Martinez, gold and silver, Reese River  
Morning Star, gold and silver, Reese River  
Monitor, gold and silver, El Dorado Canon

Magnolia, gold and silver, Tuolumne Co.  
Moscow, gold and silver, Esmeralda  
Malta, gold and silver, Nevada Territory  
Melones Creek, gold and silver, Calaveras Co  
McMahon, gold and silver, Devil's Gate  
McClelland, gold, silver and copper, Nevada  
Moselle Mining Co. Last Chance Hill  
Morning Star, gold and silver, Clayton dis  
Mammoth, gold and silver, San Bernardino  
Mission Dolores Mining Co. San Francisco  
Montezuma, gold and silver, Contra Costa  
Mountain Queen, gold and silver, Reese River  
McGregor, gold and silver, Silver mountain  
North Central, gold and silver, Big Creek  
Napa, gold and silver, Silver mountain  
Niagara, gold and silver, Tuolumne Co.  
Napoleon, gold and silver, Smokey Valley dis  
Nonpareil, gold and silver  
Noonday, gold, silver and copper  
North Star, gold, silver and copper  
Nucosari, g, s and c, Sonora, Mexico  
Noah Webster Mining Co. Humboldt Co.  
North Star Consolidation, g and s, Coso dis  
Ne Plus Ultra, gold and silver, Clayton dis  
Nuestro Senora del Refugio, s, Sonora, Mex.  
Niagara Con. gold and s, El Dorado Canon  
Natividad, gold and silver, Reese River  
Ne Plus Ultra Con. Mining Co. Arizona  
Nevada Gold Quartz, Nevada Co.  
Original Gould & Curry, g and s, Silver Mtn  
Osceola Hill, silver, Summit district  
Ossian Copper mining co, Calaveras co  
Ophir and Anburn Con. g and s, Placer co  
Old Saxon mining co, Virginia dis  
Oriental and Occidental Consolidated, g & s  
Pennsylvania, g and s, Silver mountain  
Pacific Copper mining co, Del Norte co  
Pennsylvania mining co, Bear River dis  
Pr ma Donna, g and s, Amador co  
Potsdam Con. mining co, St Mary's d, N T  
Pioneer Mill and mining co, Nevada Ter  
Panama Con. g and s, Smokey Valley dis  
Pyroide Union, gold, Contra Costa co  
Prima Donna, g and s, Devil's Gate  
Perseverance, copper, El Dorado co  
Quartz Mountain, g and s, El Dorado co  
Queen of Sheba, g and s, Washoe Valley  
Rialto Con. g and s, Silver mountain dis  
Rose, g and s, Amador co  
Rockwell, g and s, Ravenwood dis  
Rosario and Carmen mg co, Sinaloa, Kex  
Richard Hall, g and s, Lander co  
Rotschild, g and s, Sierra dis  
Rising Sun, g and s, Reese River  
Rosario, g and s, Sinaloa, Mexico  
Riverside Quartz mining co, Tuolumne co  
Ross, g and s, Humboldt co  
Reese River Ophir co  
Rich and Rare Con. g and s, Esmeralda  
Rocky Bar, g and s, Esmeralda  
Rosario, g and s, Lyon co  
Sonoma, g and s, Lander co  
Scandinavian, g and s, Silver mountain  
Sheba Cent, g and s, Humboldt co  
Santa Rita mining co, Sinaloa, Mexico  
Star of the West, g and s, Amador co  
Savage No. 2, g and s, Virginia dis  
Santa Clara Tun and M co, Esmeralda  
Silver Prize, g and s, Silver mountain dis  
Silver Creek, g and s, Silver mountain dis  
S Valley Forge g and s, Lander co  
San Francisco Bay co, San Francisco  
San Antonio Ch quito, silver, Chihuahua  
San Gabriel, gold and silver, La Paz dis  
Shrader, g and s, Russ dis  
Sophia, g and s, Bald mountain  
San Francisco, Argentine dis  
Southern Light, g and s, Reese River  
Spartan, g and s, Humb ld co  
St Andrews, g and s, Lyon co  
San Francisco mining co, Carmen Isla and  
Seneca mining co, Virginia dis  
Sierra Valley, g and s, Plumes co  
San Patricio mining co, Carmen Island  
San Fernando Qtz Mill & M co. Slate Range  
Sutter Creek, g and s, Amador co  
St Charles, g and s, Reese River  
Salamander, g and s, Coso dis  
Star of Hope g and s, Silver mountain  
Spring Lode, g and s, Esmeralda  
Silver Butte Con, silver  
Santa Barbara, g and s, Los Angeles co  
Seneca, gold and silver, Esmeralda  
St John, gold and silver, Humboldt diitric  
Smith O'Brien, gold and silver, Lyon county  
Southwest Con, g and s, Colorado district  
Sigel, gold and s lver, Calaveras co  
South Genesee mining co, Lyon county  
San Juan co, Humboldt county  
San Bernardino, g and s, San Bernardino co  
Sebastopol, Silver City dis

South Chihuahua, g and s, Esmeralda  
South Sacramento, gold and silv, Cedar Hill  
St Mary's, gold and silver  
Star, gold and silver, Lyon county  
San Francisco, g and s, Calaveras co  
Sierra Madre, g and s  
Santa Cruz Petroleum Oil M co  
Spencer, g and s, Humboldt co  
Sarah Frances, g and s, Cal. and Nevada  
Santa Clara Coal co  
San Pablo, gold and silver.  
San Francisco Tunnel & Mining Company.  
Sierra Nevada Gold Quartz Mining Co.  
Sacramento, gold and silver, Humboldt Co.  
Star of Empire, gold and silver, Marip'a Co.  
Towah Tunnel Company.  
Tilly Tunnel and Mining Company.  
Tajo, gold and silver.  
Tecoripa Mining Company.  
Terra del Fuego, gold and silver.  
Thunderer Ledge, gold and silver.  
Tam O'Shanter, gold and silver, Esmeralda.  
Tellurium, gold and silver, Amador Co.  
Thompson, gold and silver, Silver mountain.  
Teutonia, gold and silver, Gold Hill.  
Tritia, silver, Sonora, Mexico.  
Tip Top, gold and silver, Silver Mount. Dist.  
Tonawanda, gold and silver, Colorado Dist.  
Telegraph, gold and silver, Excelsior District.  
Tecolota, silver, Durango, Mexico.  
Tennessee, gold and silver, Echo District.  
Twilight Tunnel Mining Co., Gold Hill.  
Tallulah Mining Company, Humboldt Co.  
Tennessee, gold and silver, Coso District.  
Torrid Zone Con., copper, Amador Co  
Union of States, gold & silr, Santa Clara dis.  
Union Thirty Four coppe Amador Co.  
Umpire, gold and silver, Humboldt County.  
United, copper, g and s, Contra Costa Co.  
Valparaiso, gold.  
Valle, gold and silver, Gold Hill.  
Virginia Mining Company, Carson Hill.  
Vesta, Mining Company Lander Co.  
Viejo, g and s, Lyon County, N. M.  
Wisconsin Tunnel Company.  
Webster, gold and silver.  
Whitman, gold and silver.  
Weehawken Mining Company.  
Weaver, copper and silver.  
Walrath Tunnel and Mining Company.  
West Point Blue mountain Mining Co.  
Wangaman Mining Company  
Willamette, gold and silver  
Young America S F M Co.  
Washington, g and s, Lander Co.  
Wisconsin, g and s Silver mountain Dist.  
Waukasiu, g and s Inyo District.  
Winona, g and s, Esmeralda  
Wide West, g and s, Devil's Gate  
Whiting, g and s, Devil's Gate  
Waite Con., g and s, El Dorado Canon  
Wilson, g and s, Echo dis  
Wallace, g and s, Indian Valley dis  
Washoe Val Mam Co, Smokey Valley  
Winnemuck, g and c, Amador co  
Young America, g and s, San Francisco co  
Yuba, g and s, Yuba  
Ypsilanti, gold and silver.  
Young Antrim, gold and silver.  
Zurita, g and s, Virginia dis  
Zouave, g and s, Reese River

## The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.  
Due account taken of all valuable metals combined  
with Silver and Copper Ores, and advances made there-  
for.  
Parties owning undeveloped mines and desiring capital  
to prospect the same will receive assistance, if, upon ex-  
amination, such leads are deemed sufficiently valuable  
to justify such expenditure.  
OFFICE, No. 1, OLD FELLOWS' HALL,  
je-t-1 Montgomery Street, San Francisco.

## To Mining Companies about to In- corporate.

JOHN ARMSTRONG,  
CONVEYANCER,  
610 Merchant Street,  
San Francisco.

Is Prepared to draw with Accuracy and Dispatch,  
Certificates of Incorporation—Trust Deeds,  
and all other Papers,  
necessary to the correct Incorporation of Mining Com-  
panies, on reasonable terms.

All letters of enquiry cheerfully and promptly an-  
swered. Address as above. Jy27



## REMOVAL

of the "MINING & SCIENTIFIC PRESS" OFFICE:—After the issue of our present number, we shall remove to the spacious rooms, Nos. 56 and 57 Government House, corner of Sansome and Washington Street.

## THE MINERS' LABORATORY.—NO. XIII.

## MINERALOGY OF SILVER.

Silver is found in a variety of forms and combinations. Our object, in the present chapter, will be to describe them.

Silver is found native, (i, e) nature supplies us with the metal in a metallic state, occasionally. It fuses before the blowpipe; is soluble in nitric acid. The addition of hydrochloric acid, or common salt, produces a copious, white, curdy precipitate, which turns black on exposure to the light.

Some varieties contain very small quantities of copper, antimony, and arsenic; others contain gold. The specific gravity of pure silver is 10.1 to 11.

Silver occurs in veins, rarely in beds; in crystalline slate-rocks, gneiss, mica slate, hornblende slate, granite, syenite, porphyry, with arsenic and various ores of silver. It is met with most abundantly in Peru, Mexico, and Chile, and we may now add also Nevada Territory and California.

An amalgam of silver, with the following composition, has also been found in several places:—

Silver,	25.00	27.50	36.00
Mercury,	73.30	72.50	64.00

Silver also occurs in combination with Tellurium. Other metals are also present, as will be seen by the analysis given below. The scientific name of this mineral is *sybanite*. Specific gravity from 7.99 to 8.33; lustre, metallic; steel gray, tin white, silver white, some times inclining to brass yellow, streak the same. When heated before the blowpipe on charcoal it imparts a greenish-blue color to the flame, deposits a white sublimate on the charcoal, and melts into a dark gray bead. If heated with soda it yields a globule of an alloy of gold and silver; dissolve in nitric acid, with the exception of the gold, if silver be in sufficient excess; yielding a white precipitate with hydrochloric acid.

## ANALYSIS.

Gold,	30.00	26.97	26.47
Silver,	10.00	11.47	11.31
Lead,	—	0.25	2.75
Copper,	—	0.76	—
Tellurium,	60.00	59.97	58.81
Antimony,	—	0.58	0.66

*Peterite*, Lustre Metallic. Between lead-gray and steel-gray; streak the same; slightly malleable; specific gravity 8.31 to 8.83. When heated before the blowpipe on charcoal, it volatilizes, leaving a brittle globule of silver, soluble in hot nitric acid; after standing some time the solution deposits crystals of telluride of oxide of silver.

## ANALYSIS OF THE MINERAL.

	1	2	3	4
Silver,	62.42	62.32	61.55	46.76
Gold,	—	—	0.69	18.26
Tellurium,	36.96	36.89	37.76	34.78
Iron,	0.24	0.50	trace	trace
Lead and Sulphur,	—	—	—	—

Occurs in granular masses, with iron and copper pyrites and blende in talc slate in two or three mines only.

*Antimonial Silver*. Lustre metallic silver white, inclining to tin white, streak the same, sectile, specific gravity, 9.4 to 9.8; melts easily when heated before the blowpipe, emits fumes, and deposits a sublimate of oxide of antimony on the charcoal, leaving a malleable globule of silver, partially soluble in nitric acid, leaving a residue of oxide of antimony undissolved.

## ANALYSIS OF ANTIMONIAL SILVER.

	1	2	3	4
Silver,	75.25	78.00	77.00	76.00
Antimony,	24.25	22.00	23.00	24.00

Occurs in veins in granite, porphyry, and crystalline slate rocks accompanied by silver, arsenic, arsenical pyrites, galena.

*Ruby Silver*—*Seleniuret of Silver and Copper*. Crystalline, lustre metallic, lead-grey, streak shining, soft. When heated before the blowpipe, emits the smell of Selenium, or a smell resembling horse-radish.

## ANALYSIS.

Silver,	38.93
Copper,	23.05
Selenium,	26.00
Earthy matter,	8.90

This ore was found in cleavable grains in a copper mine, now forsaken.

Other varieties of Seleniurets containing silver, are met with, but they are not of much importance, and we shall not describe them.

*Galena*, that is sulphide of lead, contains silver as sulphide, amounting usually to .01 and .03 per cent. occasionally to .05 and rarely to 1 per cent.

*Sulphurets of Silver*. Lustre metallic, blackish lead-grey, streak shining, malleable, specific gravity 2.96. Before the blowpipe on charcoal intumesces, melts with disengagement of a gas, called sulphurous acid, giving off the odour of burning sulphur, and at last yields a globule of silver, soluble with the exception of sulphur in concentrated nitric acid.

## ANALYSIS.

Silver,	86.50	86.39
Sulphur,	13.50	13.61

*Stromeyrite*.—Sulphuret of silver and copper, lustre metallic, blackish lead-gray, streak the same, shining, perfectly sectile, specific gravity 6.25

Before the blowpipe it fuses readily into a gray metallic globule, which with fluxes affords the reaction of copper, and by cupellation, yields a globule of silver. Partially soluble in nitric acid, leaving sulphur undissolved.

## ANALYSIS OF ORES FROM CHILE.

Copper,	30.48	30.95	53.38	53.94	60.58	63.98
Silver,	52.27	52.71	28.79	24.04	16.58	12.08
Iron,	0.33	0.24	—	2.09	2.31	2.53
Sulphur,	15.78	15.92	17.83	19.93	20.53	21.41

Form in crystals, usually massive and disseminated.

*Copper Glance or Vitreous Copper*, such as is obtained in Plumas County, California; and Colorado. We have also seen samples of the same kind of ore from Washoe, containing variable proportions of silver from a trace to 1 per cent. Samples of this kind of ore from Chile have assayed as high as 2.96 per cent. in silver.

To detect the presence of silver in such ores, proceed as follow: Dissolve the finely pulverized sample in pure nitric acid. Evaporate the largest portion of the acid by continual boiling, dilute with water, filter, and to the filtrate add hydrochloric acid, and a white precipitate will indicate the presence of silver in the rock.

*Jamesonite*; lustre metallic, steel-gray, streak the same, sectile, specific gravity 5.564 to 5.616

Decrepitates when heated. Before the blowpipe it melts easily, deposits a sublimate of oxides of lead and antimony on the charcoal, and after, lead and antimony are driven off, leaves a slay which usually affords the reactions of copper and iron.

## ANALYSIS OF JAMESONITE.

Lead,	39.67
Iron,	2.93
Copper,	1.73
Zinc,	0.34
Silver,	1.44
Bismuth,	0.21
Antimony,	32.17
Sulphur,	18.07

MR. EDITOR:—The remarks of "A Poor Chemist" on my communication to your journal of the 3d. inst., on the tests for silver, are anything but what one would expect from a gentleman professing to be acquainted with chemical reactions. The errors that crept into my communication by inadvertence, owing to the fact that your proof reader was not well versed in chemical tests, were sufficiently evident to the merest tyro in chemistry. Allow me to inform "A Poor Chemist" that I am thoroughly acquainted with the test for chlorine. I deny, though, the assertion of "A poor Chemist" that Sulphide of Ammonium and Chromate of Potash are not commonly used as reagents to prove the presence of silver. Can he point out to me any author on practical chemistry who has neglected these tests? Would he consider an article on tests for silver complete without the above tests? especially when we take into consideration that it is your object to lay before the readers of your valuable journal, from time to time, a list of tests for all the metals.

"A Poor Chemist" also says that some statements, however, of the properties of Hydrochloric acid seem to imply absence elsewhere. I shall feel thankful to "A Poor Chemist" for pointing out to me and your readers, where I have erred in describing the properties of Hydrochloric acid when applied as a test for silver.

## DRY CRUSHING.

It is now a generally conceded fact that by the wet method of crushing quartz a large proportion of the gold is carried off from the batteries and away from the mill in the first rush of the water, employed to discharge the sands through the sieves. Gold is capable of such minute divisions, and is so easily separated that all must concede that in the violent abrasion to which it is subjected in the battery, its particles, as they occur in the quartz, must necessarily lose much of their weight by parting with numerous atoms so infinitesimally small, that the slightest current of water must inevitably carry them off.

We will illustrate, again, as we have already done in a previous number:—A piece of gold, especially if it be pure, drawn across, even so soft a substance as a piece of bone, leaves a well defined yellow mark. This mark, of course, is made of particles of gold which have been abraded by the contact of the two substances. It is often the case that gold is found through the entire mass of rock, in particles no larger than those which form this graphitic-like mark. Such, no doubt, is the character of the gold found at the Mission near this city. A moment's reflection, with this little experiment in mind, can scarcely fail to astonish any quartz miner, who has never had his attention particularly called to the matter before, at the large percentage of loss which must occur in a battery where many thousands of particles of intermingled gold are, for hour and days, subjected to the terrible abrasion of eight hundred pound stamps continually falling upon a mass of angular fragments of hard quartz. Of course, a large percentage of the gold mingled with quartz, must be reduced to particles quite as minute as those contained in the supposed yellow mark upon the bone above alluded to, all of which must inevitably be carried off by the water necessarily passing through the battery during the process of *wet crushing*. Indeed, this finely divided gold will float upon the surface of the water for a month, even when it is slightly agitated, without becoming wet on its upper surfaces, and, of course, without sinking.

Another great loss from wet crushing arises from the fact that no sieves can be made available with holes sufficiently fine to retain the quartz in the battery until it is reduced to a proper fineness for liberating all the gold which it contains. Hundreds of distinct particles of gold may be contained in a piece of quartz no larger than a pin's head, a large portion of which might be separated and saved by proper machinery, but never by any machinery where wet crushing is employed.

The facts above stated have, for years, been gradually impressing themselves upon our quartz operators, until the losses, sustained by the processes at present in use have come to be looked upon as a matter for the most serious investigation. Dry crushing, in the first instance, is the only conceivable remedy, for the losses alluded to. Of the various processes for amalgamating, there are several in use which might be advantageously employed. Of these we may speak, at length, in a future issue. The matter at present under review is crushing—wet and dry.

As already intimated the evidences of the losses from wet crushing, have long challenged the attention of quartz men and various expedients have been resorted to to render practical some process of dry crushing. The ordinary straight and round batteries have been tried with sieves boxed up to prevent the dust from rising. A very ingenious machine for dry crushing, was introduced to notice, in this city, last winter, and illustrated in this journal, known as "Pond's Crusher." We have also given an extended notice of Howell's Centrifugal Crusher, which has been quite thoroughly tested at the Pike's Peak Mines, but the latest improvement in the way of dry crushing, is a machine recently got up and patented, by Messrs. Wheeler & Hotelling, and which may now be seen in operation at the Miners' Foundry in this city.

This latter machine is the one alluded to in our last issue, which we will now attempt to describe as well as it may be done without illustrations:—

This machine, in the first place, comprises an ordinary battery—without sieves, boxed up closely. In the rear of the battery, and some some six feet distant, is a large chamber some ten feet square. Two or more tubes or pipes start from the upper, interior space, within the battery, and unite



tion the outside, as near as may be to the same, and extend to the lower portion of the chamber adjoined. About midway of this tube, is a small chamber in which is placed an exhaust fan, which, when in operation produces a strong exhaust current of air from the interior of the battery to the interior of the chamber. As a matter of course the quartz, as fast as it is thoroughly pulverized, rises, in the form of dust, is drawn through the tube and deposited in the chamber in the rear. The fineness of the dust is regulated entirely by the force of the exhaust draft, which may be easily regulated by a sliding tube or the speed of the fan. Its current is kept up and aided by a return flue, of much larger dimensions, from the top of the chamber to the lower portion of the battery—the return flue taking the air from a point in the chamber, as far removed as possible from the point where the dust is received from the battery. Actual working shows that very little is returned to the battery by a return current of air.

This machine is but an experiment, yet a most flattering one thus far. We are not yet able to determine the quantity of work which it will perform. Of course the wear and tear can be no more than that of an ordinary battery. Our impression, from what we have seen, is that the battery now in use—four stamps of 500 lbs. each—can reduce about 30 tons of rock, delivered to the battery dry, in twelve hours. The rock delivered from the machine is reduced to fine dust, exhibiting but a mere grit, when tried between the fingers, dry. We have, at our office, a sample of the dust which we took up at the mill, from a large mass, as a sample of the whole.

Important improvements are already in contemplation. The experiment is in the hands of parties who have had considerable experience in quartz mining, and who will spare no efforts in bringing it to perfection. Quartz miners and others interested will do well to examine and judge for themselves. The machinery has been at work upon rock from the quartz mines back of the Mission in this city.

#### THE MINING SHARE MARKET.

The Mining Share Market has presented nothing of special interest during the past week. It has been characterized by rather more than a fair degree of activity and with about the usual fluctuations. The transactions may be set down as large, though generally at reduced rates. Advanced rates, however, are noted in several shares. Gould & Curry, early in the week, declined \$250 on time, but subsequently advanced a shade, closing firm at \$4,725, for reason so far as we have been able to learn, has been assigned for the recent decline in this stock. The yield of the mine continues without abatement, and larger dividends are confidently expected after the present month, or as soon as the additional works now in progress have been completed. The late sales have been made by parties who have heretofore refused the highest offers.

Ophir shares opened at \$2,450, advanced \$75 on time, but closed at \$2,350, with sellers at 2400. The recent "rich strike" in this mine is still reported as continuous, with no appearance of "giving out"—anything but the richest kind of ore valued at from \$1,000 to \$3,000 per ton. If there is any approximation to truth in the reported richness of this rock, it is difficult to conceive why the Company should not increase their dividends, at an early day, to a higher figure than by which it has yet reached.

Potosi shares are held firmly at an advance of \$100. We quote at \$825. It is said that a fierce contest will be made by the Grass Valley Company for a title to this valuable mine, and that every preparation has been made by them to strengthen their application for an injunction against the Potosi. The argument is to be heard by Judge Mott during the present week.

Grass Valley stock, under the influence of the above proceedings, is in request at about \$95.

Chollar shares, which had advanced, the previous week to \$1,150 @ 1,500, have not been so much sought after, the past week, and have declined to \$1,300. The affairs of this Company, at the present time, are under a most prosperous condition, such as can scarcely fail to advance its shares, at an early day, beyond any figure which they have yet reached. It is stated that sixty tons of ore are now daily taken out of the north end of the mine, which is sold

at an average of \$30 per ton. The company's new 100 horse power engine for hoisting, pumping, etc., will be used 400 feet south of the present workings; the shaft at this point has penetrated to the depth of 285 feet.

Hale & Norcross has not been in the market the past week. Its stock is held by parties who are not anxious to part with it, at present offers.

Central and California shares have not been much dealt in.

White & Murphy, Dick Sides and Best & Belcher, are withheld at present. "No transactions" are reported in these shares. Judge Mott has granted an injunction against the the Kohinoor Company, at the instance of the Best & Belcher.

Spanish No. 2, adjoining the Mexican and Ophir on the North-East. According to the Prices Current of the 13th inst., this mine "is attracting some attention." After two years of patient labor and the expenditure of a large amount

of money by this company, it is said that a continuation of the "white lead" of the Ophir and Mexican has been developed, and that abundant pay metal is now in sight. This stock has been dealt in, the past week, at great fluctuations, opening at \$75, and closing at \$35.

Buckeye has been quite active, in fact has been the fancy of the week. Sales of 553 shares are reported at \$38 @ \$62½. It opened the week at \$55, advanced to \$60, at which figure some large sales were made. Buyers were induced to invest upon the report of a favorable financial condition of the company, with cash in hand, a large amount of pay ore on the surface and a new vein "just opened," containing "black sulphurets, very rich." The speculators having accomplished their purpose, the shares fell back to their old standard and closed the week at \$38.

The Sacramento and Meredith Companies having consolidated their interests, will hereafter be known as the "Sacramento & Meredith Mining Co." The latest quotations of these shares are \$115 for the former, and \$70 for the latter. No sales of the consolidated stock have been reported.

Overman is still growing in favor. Its shares have been considerably dealt in during the week, fluctuating from \$380 to \$500, closing at \$390.

Wide West has been largely dealt in, at declining rates. These shares opened the week at \$165 and gradually fell to \$145 @ \$147 at the close—sellers \$150.

Real del Monte shares have attracted marked attention. Closing the previous week at \$275; they opened the past at \$300, advanced to \$435 and closed at \$415. Sales of 130 shares are reported.

Esmeralda is dull at \$22, Silver Hill at \$30 @ 33, Ural firm at \$150.

Coso has declined to \$11, Josephine advanced to \$13½, and Willow Springs is quoted at \$14½.

Sheba shares have changed hands to a limited extent extent at from \$222 @ \$225. De Soto had advanced to \$70, after having sold for \$48.

#### COPPER.

We have no report of transactions in copper stocks for the past week. Intelligence from the mines, however, is still of the most gratifying nature. Almost daily reports are reaching us in the shape of large quantities of well filled sacks of the most promising ore.

The Table Mountain Copper Co., near Copperopolis, has made its first report of this description, which may be seen in front of the Secretary's office, on Montgomery street and which is elsewhere alluded to more at length.

The Union, Keystone and Napoleon still continue their regular shipments. Small shipments are also beginning to come in from several new sections of the copper belt, which are received as the earnest of larger ones soon to follow.

Considerable attention is being attracted to the copper mines upon the Colorado. Some very superior ore has recently been received from that section.

PICK MANUFACTORY.—We would call the attention of miners to the advertisement of Mr. HIRAM WHITE, which will be found in our columns to-day, who has recently established himself, on Bush street in this city, for the manufacture of Picks for miners use. Mr. Wright makes a very superior article and miners or others engaged in the trade will do well to call upon him.

#### REPORT OF BIDS

At the San Francisco Mining Stock Board,  
For the week ending Aug 16, 1883.

Names of Companies.	Total No. Shares.	Shares per lot.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2455	2450	2450	2450	2400	—
Gould & Curry	4,800	4	800	4900	4900	4800	4800	4825	\$770
Central	1,800	12	300	—	—	—	—	—	—
California	5,600	12	500	—	—	—	—	—	—
Chollar	5,600	4	500	1300	1350	1360	1200	1300	1300
Potosi	2,800	2	600	—	—	700	—	700	725
Hale & Norcross	800	2	600	1600	2100	2000	1600	200	200
Sierra Nevada	3,000	1	600	86	97½	100	96	167½	85
Danby	8,000	4	500	170	177½	177½	171	180	165
Burning Moscow	4,800	2	100	90	85	90	81	90	82
North Potosi	2,000	1	300	45	40	40	40	40	40
Rogers, F. D.	3,000	1	250	—	—	—	—	—	—
Meredith	7,200	2	125	69	60	—	—	50	50
Charles Caney	1,800	1	30	—	47½	47	50	50	48
Sacramento	1,800	1	500	105	100	82½	90	80	85
Lucerne	1,800	1	600	—	—	—	—	—	—
Lady Bryan	6,000	1	100	—	—	—	—	—	—
Salvage	800	1	—	332½	3350	3300	3300	3200	3350
Iowa	—	—	—	—	—	—	—	80	80
El Dorado	—	—	—	84	81	82½	79½	78	70
Norton	1,800	1	—	3½	—	8½	4	3	—
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	—	10	9	8	5	6
Adriatic	—	—	—	—	—	3	3½	4	3½
Brennus	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel	10,000	1	100	2½	2½	2½	2½	2½	2½
Mount Davidson	10,000	1	200	5	2½	2½	2½	2½	2½
Real del Monte	4,400	1	400	300	345	390	420	485	360
Esmalda	1,200	1	100	—	—	—	—	—	—
Utah	1,600	—	250	60	61	61	62½	60	55
Silver Hill	3,000	1	500	30	30	30	30	31½	27
Nevada	1,200	—	250	—	18	12½	—	—	—
Federal Hope	—	—	—	50c	—	40c	50c	50c	—
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	—	—	—	—
Ball of Clyde	—	—	—	5	5	5	4½	5	5
Sanbeam, A. W. ex.	—	—	—	—	—	—	—	—	—
Bamboo	600	1	500	—	25	—	—	—	—
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	10	11	11	11	12	13
Coso	5,600	—	600	12½	12	12	11	—	9
Willow Springs	2,700	1	100	6	5	4	4	4	4
Empire	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	—	1000	—	—	—	—	—	45
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	40	47½	45	—	—	50
Josephine	—	—	—	—	—	—	—	—	2
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	—	—	—	—	—	—	—	—	—
Utica	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	—	—	—	—	—	—

#### SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.



**ALEXANDER STOTT,**  
MINING SECRETARY,  
512 Sansome Street, San Francisco.

Secretary of—

HORSESHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District, au10

**PATRONIZE  
HOME MANUFACTURES!!!**

**James Longshore,**  
Trunk and Valise Manufacturer,  
307 Sansome Street, under Tehama House. Trunks and  
Valises, Wholesale and Retail, Fine Sole Leather Trunks,  
Valises, and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
aug x

**W. W. HANSCOM,**  
Steam and Mechanical Engineer,  
Designs furnished, and Drawings made for  
Engines, Mills, Water Wheels, Mining Ma-  
chinery, etc., etc.,  
At Golden State Iron Works,  
aug x First Street, San Francisco.

JOHN P. GALLAGHER.....JOSEPH H. WREED.

**GALLAGHER & WEED,  
BRASS & BELL FOUNDRY  
AND  
LOCK FACTORY.**

No. 125 First Street, opposite Minna, next door to Pacific  
Foundry, all kinds of

**Brass and Composition Castings and  
Finishing, done with neatness and  
dispatch.**

**CHURCH AND STEAMBOAT BELLS, OF ALL SIZES**  
Made to order. Enginee's Gongs made and hung  
in the best manner. Bank, Vault, Store and Prison  
Locks, also brass Padlocks and Shop Locks of various  
patterns, on hand and made to order.  
Particular attention given to casting Rudder Braces  
and Ship Work in general.

All Jobs promptly attended to.—Prices  
moderate.  
Removed from Oregon street, between Front and Davis.

**WRIGHT'S PICKS.**

**JOHN WRIGHT**, of Sacramento, has established him-  
self in San Francisco, for the manufacture of every  
description of PICKS, of the best material, at reduced  
prices. PICK EYES of the best iron furnished in any quan-  
tity, at low rates. Orders from the country promptly  
attended to. N. B.—None genuine unless stamped with  
my name. **JOHN WRIGHT**, 611 Market street,  
Opposite Battery, San Francisco.

**WANTED,  
GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,**  
By **FRONTIER A. DEVIEROY**,  
13 ap 487 Pine street, San Francisco.

**HAYNES & LAWTON,**  
IMPORTERS AND DEALERS IN  
**CROCKERY,  
GLASS WARE,  
FRENCH CHINA,  
Coal Oil Lamps, Table Cutlery  
CLOCKS,  
Silver Plated and Britannia Ware,  
ETC., ETC., ETC.**  
NO. 516 SANSOME STREET  
[CORNER OF MERCHANT.]  
SAN FRANCISCO.

**International Hotel,**  
JACKSON STREET,-----SAN FRANCISCO  
[A few doors above Montgomery.]  
**FIRE-PROOF BRICK BUILDING.**  
Most convenient to the  
Steamer's Landing, Business sta. & Places of Amusement  
**OPEN ALL NIGHT.**  
City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Five Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FUR-**  
nished this spring. Every Room opens to the Light  
and Air. Each room is furnished with a first quality  
Patent spring Bed and Hair mattresses. The International  
offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**  
and sets as good a table as any House in the City.  
I am determined that the INTERNATIONAL shall be the  
most comfortable, best regulated, and in all respects su-  
perior to any like establishment in the state, and shall aim  
to merit a continuance of the popular favor it has  
enjoyed heretofore. It will be conducted on Temperance  
Principles.

**F. E. WEYGANT, PROPRIETOR.**

**John R. Sims,**



Oregon street, between Washington and Davis and Front  
and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and**  
Shutters, Bank Vaults, Grating, Cemetery Rail-  
ings. All orders from the Interior Oregon, Washington  
Territory, Vancouver's Island, British Columbia, or any  
place on the Pacific coast, attended to with promptness  
and dispatch.

**Mr. Sims Appreciates the Past**  
liberal patronage of his friends, and trusts that he may  
continue to merit it in the future.

**For the Information of Strangers**  
he would say that he feels confident that his experi-  
ence in his particular calling is surpassed by none on  
this coast, which his superior work, sent to almost every  
town in this state, Oregon, also Victoria and the Sand-  
wich Islands, and to be seen on some of the best build-  
ings in San Francisco, fully attests. A large assortment  
of second hand shutters for sale at low rates. ap13

**NATHANIEL GRAY,**  
General Furnishing Undertaker,  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

**FULTON FOUNDRY & IRON WORKS**  
**HINCKLEY & CO.,**  
MANUFACTURERS OF

**Steam Engines**  
QUARTZ, FLOUR AND SAW MILLS; CAST IRON  
FRONTS, FOR BUILDINGS, MINING PUMPS,  
AND ALL KINDS OF MACHINERY, ETC.,  
FIRST STREET,  
BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*\* All kinds of IRON and BRASS CASTINGS furnished  
at short notice. Every style of FINISHING to Iron when  
cast. Repairing of Machinery neatly done.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**W. T. & J. GARRATT,**  
City Brass and Bell Founders  
Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE**  
and Lift Pumps, Church and Steamboat Bells, Tav-  
ern and Hand Bells and Gongs, Hose and all other joints,  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PIPES and NOZZLES for MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.;  
COUPLING JOINTS of ALL SIZES. Manufacturers of "Gar-  
ratt's Patent Improved Journal Metal."

**SQUARZA'S PUNCH.**  
FIRST PREMIUM  
AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1882.  
ALSO; FIRST PREMIUM  
At the San Francisco Bay District Agricultural Fair, 1882  
MANUFACTORY, WHOLESALE AND RETAIL,  
No. 44 Leidsdorff street,  
Opposite the What Cheer House, San Francisco.

**R. W. FISHBOURNE,**

**PRACTICAL LITHOGRAPHER,  
ENGRAVER AND PRINTER,**

NO. 529 CLAY ST. CORNER OF LEIDSODORFF,  
San Francisco, State and County Bonds, Stock  
Certificates, Bills of Exchange, Bills of Lading, Bank  
Checks, Landscapes, Architectural and Marine Views  
Show Cards, Labels, Etc., executed with neatness and  
dispatch. N. B. All orders in Crayon Work promptly  
attended to.

**MINING.**

N. B. Mining Stock Certificates executed with prompt-  
ness and dispatch, and at greatly reduced rates. jy6

**MARTIN & Co.,**

OFFICE--224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

**Purchase of Copper Ores,**

Assaying 8 per cent and upwards of Copper to the Ton.  
We will make ADVANCES upon Ores of COPPER, TIN  
and NICKEL.

Sacks will be furnished and Freight Paid on all con-  
signments if desired by the consignors.

**HENRY MARTIN, J. F. GREENMAN,**  
New York. San Francisco.

Sau Francisco Post Office, Box 1259.  
je 1.

**Tremont House,**

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY**  
advantages to the traveler for convenience. It is  
only half a block from the Post Office and Custom House,  
and about the same distance from the principal places of  
Amusement.

**The City Railroad Cars pass the Door.**

The House is conducted on Temperance Principles,  
WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—  
by the day, meal or week. WE SOLICIT A CALL FROM ALL.  
F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have ta-  
ken and refurnished the INTERNATIONAL HOTEL, and will  
carry on the two houses in connection, so that Travelers  
wishing to put up at either house, may take the Tremont  
or International Hotel Coach and be taken to either House  
with their baggage, FREE.

**F. E. WEYGANT.**

**LEANDER RANSOM,**  
Civil Engineer  
AND  
**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL  
LANDS,**

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. cor-  
ner of Montgomery and California streets. oct 3m



**DR. H. AUSTIN,**  
DENTIST,

No. 634 Washington street,  
Between Montgomery and Kearny, (over San Francisco  
Baths.)

I have recently received from London a New and  
Beautiful Vulcanite (India Rubber) for Artificial Teeth,  
which is far superior to any other ever used. It is light  
cleanly and durable, and of a natural color. The cheap-  
est and best material for temporary (and in many cases)  
permanent sets. All operations thoroughly performed,  
and at reasonable prices. je-29

**To Mining Companies.**

**FOR SALE—A STEAM ENGINE AND BOILER.** THE  
Engine is 30 horse power—10 inch cylinder—24  
inch stroke—solid iron frame, with heater, pumps, etc.,  
all complete. The boiler has 5 flues, is 24 feet long, 40  
inches in diameter, made up from the best three-eighths  
inch Low Moor iron, and weighs about 5000 pounds.

Both Engine and Boiler are in perfect order and fully  
guaranteed. Apply to  
I. H. HAM, [No. 211 Clay st.  
San Francisco, June 13, 1883. 3t

**DESKS**

AND

**Office Furniture,**

OF ALL KINDS.....FOR SALE BY

**JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all kinds, attended to.

**PALMER, HANSCOM & CO.,**

**GOLDEN STATE IRON WORKS,**

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

**GENUINE WHITE IRON SHOES AND DIES.**

PALMER, HANSCOM & CO.

**To Quartz Miners.**

**Knox's Improved**

**AMALGAMATING PAN,**

WITH

**PALMER'S PATENT STEAM CHEST.**

**THE ABOVE COMBINATION SECURES THE MOST**  
complete amalgamation of the precious metals of  
any process now known.

By its steam is introduced in the most effective and eco-  
nomical manner, while it is peculiarly adapted to the  
catching of floating gold and silver, known to be other-  
wise lost. Made exclusively by

**PALMER, HANSCOM & CO.,**  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

**T. C. Sanborn & Co.**

**STOCK BROKERS,**

No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**

**GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,**

**BOUGHT & SOLD.**

**DEETKEN'S**

**Chemical and Metallurgical Works,**

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REAS-**  
ONABLE RATES. ALL THE GOLD EXTRACTED by Chem-  
ical process. Yield of Sulphurets from 30 to 60 per cent  
higher than the BEST AMALGAMATION PROCESS.  
Apparatus for separating Sulphurets set up by ex-  
perienced hands at a cost of \$50 to \$100, if desired by  
mill owners. No power nor clean water required for  
purpose. nov8-3m

**LEWIS COFFEY AND RISDON,**

**STEAM BOILER AND SHEET IRON  
WORKS.**

The only exclusively Boiler Making Establishment on the  
Pacific Coast Overlooked and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.

**LEWIS COFFEY**

**J. N. RISDON.**

**THEODOR KALLENBERG**

**Maker of Models**

**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophical**  
Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and Die Sinking, Embossing stamps.  
Repairing of Machinery promptly attended to.  
No. 418 Market street, San Francisco.  
n7-3m) San Francisco.



## THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.

H. T. FELTON - - - W. C. MINOR,  
PROPRIETORS.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey its passengers and their baggage to the House **Free of Charge**.

The House is open all night.

## New Style of Ladies' Buckle!

W. BOHM,  
INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been a qualified to be a useful improvement, and Letters Patent have been granted for 17 years. It excels all other buckles in

**Usefulness, Strength and Appearance.**  
The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of  
BERNARD & LEEY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 1 Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm," will be guaranteed as to its Strength and Durability.  
Jy 27 W. BOHM, Patentee.

## WILLIAM BRODIE & CO., CALIFORNIA FOUNDRY,

Fremont Street, near Market, San Francisco.

### Light and Heavy Castings,

Of Every Description, Made to Order. Particular attention paid to all kinds of House Work, Plain and Ornamental.  
Jy 13

### Giffards Injectors,

FOR SUPPLYING BOILERS WITH FEED WATER without Pumps. No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODDART, Agent,  
Jc22 Cor. Pine and Front Sts., San Francisco.

## I. C. E. KLEPZIG & CO., GUN MAKERS,

DEALERS IN GUN MATERIALS,  
733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Ekland. Jc21

## CORNELL'S EXCELSIOR GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the undersigned is now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As I have every facility for producing these beautiful pictures, in all their different varieties, I have reduced the price to

**\$3 PER DOZEN and \$2 PER HALF DOZEN!**  
Large size Photographs. \$3—Extra copies \$1 each  
AMBROTYPES in all Styles and Prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in Indian Ink by a competent artist.  
Jc22 R. H. CORNELL.

## BAUNCHEIDTISM,

THE PRESERVER AND PRODUCER OF LIFE.

THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF curing disease, is a "fait accompli" in medicine, and needs no more proof. The public has crowned Bauncheidtism already with an extraordinary patronage, and it is acknowledged by all men of science that BAUNCHEIDTISM is founded on a rational, scientific basis. It can be safely, and with sure success be applied to paralysis in consequence of Apoplexy, Podagra and Rheumatism of every description, which kind of complaints can find their only relief by the above method. Especially can it be applied successfully, in the spring of the year to diseases of the eye.

Dr. Borchers is the only doctor in California who has the original series of Dr. BAUCHEIDT and his original oil. Dr. Borchers is also in possession of original letters of the inventor of the method by which he can prove that he is perfect master of the latter.  
DR. J. C. BORCHERS.

No. 19 Kearney street, and No. 4, Mark's Place, First story, No. 5. Office hours from 9 to 11 A. M., and 1 to 4, and 7 to 9 P. M. Jc21

## THE BRYAN BATTERY.

The vast interest involved in the reduction of area on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

### METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any place of mining machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1840, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed being cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

### MANUFACTURED ONLY BY

## GODDARD & CO.,

At the Pacific Iron Works.

SAN FRANCISCO.

on 125 to 136 First street, and 126 to 144

Fremont street.

## P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S  
Line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

### FOR PANAMA.

The following Steamships will be dispatched in the month of May, 1863.

Aug. 3d, - - - - - Steamer Orizaba.

Aug., 13th, - - - - - Steamer Golden Age.

Aug. 23d, - - - - - Steamer St. Louis.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.  
For Freight or passage, apply to

A. B. FORBES, Agent.

Je4 Corner of Sacramento and Leidesdorff sts.

## WHEELER'S

### Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to flow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

These Pans have been in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves.  
2c16-tf ZENAS WHEELER.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

## D. MORRIS, MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

### WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. Jc13

### REMOVAL.

OFFICE OF THE PACIFIC METAL  
Surgical Office is removed to 509 Sacramento street Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansone.

### SOUTH PARK

### Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO,  
Office in Shiel's Block, opposite Masonic Temple,  
Jc13 S. F. CLOUSER, Secretary,

### CALIFORNIA TOOL WORKS!

John Weichhart,

Manufacturer of

All Kinds of Edge Tools, Etc.,

Plane Irons

Moulding Irons,

Stone Cutter's Tools, etc

No. 22 Fremont street, bet Market and Mission,  
San Francisco, July 14, 1863. Jy 20



**ASSAYS!****Promptness and Accuracy Secured**

BY THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,**  
(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. j56

**Miners' Foundry**

—AND—

**MACHINE WORKS,**

First St., between Howard & Folsom,  
SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING  
San Francisco, February 23, 1863.

**San Francisco Machine**

—AND—

**IRON WORKS!**

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON most reasonable terms.  
Steam Engines, High and Low Pressure; Quartz mills; Saw mills, Mining Pumps, Hoisting machines for mining purposes, Wine Presses, Agricultural implements etc., and, Castings of all descriptions made to order.  
Steam Engines exchanged and for sale by  
DEVORE, DINSMORE & CO.

REPAIRING promptly attended to.

FOR SALE.

One Upright Post Drill, Putnam's manufacture, All-  
so one thirty-inch screw Chuck.  
San Francisco, July, 1863. j13

**50 lbs. MARINE and  
Fire-Proof Paint,**

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Bales and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUE, Superintendent.  
WORKS, North Beach; Office, 509 Sacramento st., San Francisco.

**FREDERICK MANSSELL,****MECHANICAL & ARCHITECTURAL****DRAUGHTSMAN,**

No. 422 California street, corner of Leidsdorff

Drawings of Models made for parties applying for patents at Washington or London. mar23 2m

**Napoleon Copper Mining Company.**

Capital Stock.....\$1,620,000.  
2,700 Shares---\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACCRELLISH  
Secretary.....Q. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....RICHARD FOWNING

**TRUSTEES.**

F. MACCRELLISH, of Alta California  
M. ERLENBACH, of Greenberg, Erlenbach & Co.  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 429 Montgomery street.  
je29

**San Antonio Gold and Silver Mines,**

LOWER CALIFORNIA,

**FORWARDING & MINING AGENCY.**

SAMUEL SMITH,

OFFICE—North West Corner of Front and Clay  
Streets, San Francisco.

MINING MACHINERY AND MERCHANDISE FORWARDED, Mining Claims secured, through the resident Agent at San Antonio, and information furnished regarding any claim, in that Territory, on Commission. je26

**FOR SALE.****PATENT PRESSED RUSSIA IRON MINING PANS.**

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe, Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks, Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

**UNEQUALLED****MONITOR COOKING STOVE****OR RANGE,**

FOR HOTELS.

To which we call particular attention.

je-29 TAY, BROOKS & BACKUS.

**MOYNIHAN & AITKEN,****Boiler Makers and Blacksmiths,**

Mission, between Beal & Fremont Sts,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms. jy 29

**L. F. LELAND,****STOCK BROKER,**

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

**MYERS & DAGGETT'S****Mining and Stock Exchange,**

No. 23½ B Street, Virginia City, N. T.

**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* Abstracts of Titles Furnished, Etc.

**AGENCY**

For the Purchase and Sale of

**MEXICAN MINING STOCKS**

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA Silver Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.  
je13 Wm. FAULKNER.

**H. C. KIBBE,****MINING SECRETARY,**

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery  
(ARMORY HALL.)

**EXCELSIOR IRON WORKS,**

712 Sansome street,

Between Sackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,**

Manufacturers of all kinds of

Architectural and Ornamental Iron Work,  
Bank and Store Vaults, Safes, Doors, Shutters, Balcony, Area and Cemetery Railings, Gates, Stairs, Etc., and all kinds of Blacksmithing and Jobbing done with promptness, and at  
Reasonable Prices.  
Orders from the country promptly attended to.  
je13

**APARTMENTS.**

FURNISHED APARTMENTS, WITH, OR WITHOUT Board, at 1018 Powell Street, between Clay and Washington Street. Persons desirous of a respectable home will do well to apply  
j56

**E. C. DAKE,**

DEALER IN

**CLOTHING,**

AND

**Gentlemen's Furnishing Goods;**

ALSO

HATS, CAPS, ETC.

At THE NEW YORK CLOTHING STORE,

541 & 543 Washington st. Montg'my Bldg  
je] Old No. 145. [29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY

**PEASE, BOWLEY & CO.,****Real Estate, Stock and Exchange****BROKERS,**

621 Montgomery street, San Francisco.

**LEGAL TENDER NOTES AND MINING STOCKS,**

BOUGHT & SOLD.

je-29

**PUMPS!****HARRISON'S****California Lift and Force Pump,**

WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

**ALL SIZES;**

Capable of throwing from ONE HUNDRED to FIVE THOUSAND Gallons per Minute—For sale by

**C. H. HARRISON,**

PHOENIX OIL WORKS,

je-15 617 Front Street, San Francisco.

**New Bedford Copper Company.**

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

SHEATHING COPPER;

BRAZIER'S COPPER;

COPPER BOLTS;

YELLOW SHEATHING METAL;

COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.  
MORGAN, STONE & Co  
je-29 108 Front Street, San Francisco.

**IMPORTANT!**

To Mining Companies, Miners,  
Prospecting Parties, Commanders  
of Ships, &c., &c., &c.

THE UNDERSIGNED HAS RECEIVED

A new supply of the celebrated

DESICATED AND COMPRESSED  
VEGETABLES,

Of Messrs. CHOLLET & CO., PARIS, which he offers now for sale in lots to suit.

These Vegetables being perfectly fresh and sweet, are the best preventive of scurvy and other diseases resulting from the continued use of salt provisions.

They are already cleaned and prepared for cooking are perfectly preserved, and offer great advantages for transportation. 25,000 rations being packed in the space of one square yard, while 2,000 rations—or equal to 1,000 lbs fresh vegetables—weigh only from 100 to 125 pounds.

CHARLES MEINCKE

aug 3

No. 216 Front street,

**Offices To Let,**

In the Government House, Corner of  
Washington and Sansome Streets. Two large suits of  
Offices, the most commodious and accessible in the city.  
C. A. CRANE, Proprietor

**Eye, Ear and Throat.****DR. DE CASTRO,**

Oculist and Aurist,

**WHO HAS PRACTISED IN NEW**

York and all the principal cities of Europe, with such unrivalled success, and from each place is in possession of the most eminent testimonials, may now be consulted upon diseases of these delicate organs, with a view to their permanent cure. Deafness of long standing thoroughly cured. The Doctor employs his (by the Medical Society of London approved)

**Self-adjusting Artificial Tympanum,**

For the relief of deafness, attended by loss or injury of the membrana tympani, and for the cure of discharge from the ear—the invention of Dr. Castro, M. D., author of "Deafness Practically Illustrated as to its Nature and Treatment," etc.

The self-adjusting Artificial Tympanum was first introduced to the notice of the profession at the meeting of the Medical Society of London, on the 20th of November 1863. An animated discussion ensued on the reading of the paper, and several members of the Society bore testimony to the success of the remedy and the importance of the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-Adjusting Artificial Tympanum, as he had observed the immense benefit a young lady friend of his had received from it. She was in fact, quite deaf, and in a most miserable state; the effect of the tympanum was instantaneous—quite like a miracle. Five more testimonials from Members of the Medical College, New York, and the principal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and Kearny streets. Entrance on Market street.

32. Mr. Editor—Having been afflicted with deafness for the last two years, originating from a severe cold, and for the last month suffering from the most excruciating pains in my ear, I was obliged to come down to San Francisco to seek relief. After a physician's recommendation to wait on Dr. De Castro, on the corner of Kearny and Market streets, and underwent one operation, and it is with the utmost pleasure I can say my hearing was suddenly and without pain entirely restored. I deem it my duty to make this known to the public, and to recommend Dr. De Castro's skill as an aurist.

JOHN REESE, Napa Valley.

James Callaghan, witness,

San Francisco, July 30th, 1863.

[From the Daily Alta.]

San Francisco, June 30th., 1863.

ED'S DAILY ALTA:

Permit me through your widely circulated journal, to say that my daughter Mary Ellen, has been afflicted with deafness since she was thirteen months old, and that she has been a member of the Deaf and Dumb Institute since it was organized. On taking her to Dr. De Castro, on the corner of Kearny and Market Streets, and undergoing under his direction, two operations, she has heard sounds very distinctly; and is now, I am happy to state in a fair way to get permanent relief. The result, thus far, is satisfactory; and I deem this notice due to Dr. De Castro for his skill, and would recommend all parties similarly afflicted to give him a trial. My daughter has at different times been under the care of the most skilful physicians and aurists in California, but up to the period of visiting Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT,  
812 Green Street.

**MINING CERTIFICATE LOST!**

Certificate for Ten Shares, No. 23, dated July 8th., 1863, of Tamplius Gold and Silver Mining Company. The finder will be suitably rewarded by leaving it at room 24, Government Block.

LOUIS EDWARDS.

**CHARLES GEDDES,****ARCHITECT,**

Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms,

jy 20

San Francisco.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, THURSDAY EVENING, AUGUST 27, 1863. NO. 43.

## LIST OF INCORPORATED MINING COMPANIES,

GIVING THE NAMES OF THE COMPANIES, NAMES OF SECRETARIES, LOCALITIES OF MINES AND OFFICES.

We present our readers, to-day, with a Supplementary Edition of eight pages containing a revised list of Incorporated Mining Companies. This list contains the names of over *One thousand Companies*, with their Secretaries, location, etc. In addition to these we give the names of upwards of *three hundred* other companies, the names of whose secretaries and other data, we have not yet been able to obtain. We shall issue another edition of the Directory in about a month from this time, which we are desirous to make as full, complete and perfect as possible. Any changes which may be made in the mean time, if handed in, will be corrected in that issue, and any additions made.

The work, we are doing, is an entirely gratuitous one. The Directory is furnished to subscribers without extra charge, as a supplement to our regular edition. We have made several hundred additions to our last issue, and a great number of corrections. All must admit the importance and convenience of such a publication. In fact it has become quite a necessity. The Secretary of every Mining Company owes it, as a duty to his Companies and to the public, to see that all the Companies which he represents have a place in this Directory. Whenever a change is made in the location of the office or the name of a Secretary, the fact should be promptly communicated to this office, so that it may appear corrected in the next issue. Such attentions will save a great amount of labor on the part of individual stockholders who may have business at the offices of the various Companies.

Adonia, silver, Lower California, Mexico, A Marcus, 519 Montgomery street.  
Ashby Stewart, copper, Garden Dist, Placer county, J H Culver, 43 L street, Sacramento.  
Anglo Saxon, copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sac.  
Apollo, g and s, Reese River Mining Dist, 228 Front street.  
Anderson, copper, I C Pray, 626 Merchant street.  
Admiral gold and silver, Sierra Dist, Humboldt, M M Barker, 406 Montgomery street.  
Antelope Consolidation, cop, Antelope Dist, Calaveras co, M Walthal, Jr, 228 Montg. St.  
Apache Chief, gold and silver, T Brownjohn, 621 Clay St.  
Cetiz, G & S, Esmeralda, R Robinson, 636 Sacramento St.  
Libion, G & S, Slate Range, James Hitchings, 13 Mead House.  
Ita, G & S, Silver mountain, O Christensen, 213 Jackson St.  
Austra, gold and silver, C B Hart, 15 Metropolitan Block.  
Antelope, gold and silver, Esmeralda, J F Miller 327 Montgomery street.  
Alamo, g, s, & c, Contra Costa, Co., J W Crosley, 9 & 10 Government House.  
Deltaide Consolidated, gold and silver, Silver mountain, R Clarke, Met. Block.  
Antelope Spur, silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
Adonia, silver, San Antonio, L. C., L Landsberger, 519 Montgomery street.  
Libion, gold and silver, Slate Range District, W H Clark, 224 Monterey street.  
Magosa, silver, Salt Spring District, J A Rawson, Athenæum Building.  
Augusta, silver, Calaveras Co.,  
Austin, silver, Esmeralda District, R O Sturtevant, 428 Montgomery street.  
Annapolis Con, silver, Esmeralda District, C E Buckingham, 607 Clay street.  
American Pioneer, silver, La Paz, New Mexico, G W Blake, 224 Montgomery street.  
Shland, gold and silver, Virginia District, Thos. Brownjohn, 621 Clay street.  
Ita, silver, Silver City, L D Ingoldsby, 80 Merchant street.  
Antioch, copper.  
Cetiz, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
Alcatraz, silver, Reese River District, A S Gou'd, 528 Clay street.  
Abbe Faria Mining Co.  
Bisal, gold and silver.  
Mazonia Mining Co. Reese River, R T Polk, 56 Metropolitan Block.  
Anna Smith Mining Co. Reese River, R T Polk, 56 Metropolitan Block.  
American Freeman, gold and silver, Thos. Hill, Pioneer Building.  
Guas Calientes, gold and silver.  
American, gold and silver, Star District, W H Martin, 617 Clay street.  
Mazon Tunnel Co.  
American, gold and silver.  
Arizona, silver and copper, La Paz, Thos. Brownjohn, 621 Clay street.  
Stor, gold and silver, Gold Hill, N T. E C Lovell, 436 Jackson street.  
Atlantic, gold and silver, Pacific Ledge, L F Yates, Virginia City.  
Itan, gold and silver.  
Regentoro Mining Co.

Ajax, gold and silver, Coso District, V B Post, Lucas & Turner's Building.  
Adona, gold and silver.  
Am. Baltimore, gold and silver, J Crocker, 413 Montgomery street.  
Atlas, gold and silver, Esmeralda District, L D Ingoldsby, 80 Merchant street.  
Argenti, gold and silver.  
Alcatraz, gold and silver.  
Alice, gold and silver, Mogul Mining District, M. L. McDonald, 34 Metropolitan Block.  
Antelope Con. Ex. M. Co. Del Norte county.  
Amelia, gold and silver, Prairie District, El Do county, D F Verdenal, 636 Clay street.  
Alamo, gold silver and copper, Contra Costa county. J W Crosley, Government House.  
Albany West, gold and silver, Slate Range.  
Alameda Coal Mining Co., Alameda County, L Franconi, Lucas & Turner's Building.  
Ashim, gold and silver, Esmeralda District, I N Choynsky, Esmeralda.  
Atwill, gold and silver, Flowry District, T Brownjohn, 621 Clay street.  
American Eagle, gold and silver, Excelsior District, Wm E Gavy, 619 Merchant street.  
Atlantic, gold and silver, Monitor District, T J Owens, 1 Armory Hall.  
Astor, gold and silver, Echo Dis'. Humboldt Co., Ferdinand Vassault, 4 Barron Building.  
Aurora Silver Mining co. Henry Van Pelt, 436 Montgomery street.  
Animus, silver, Durango district, Thomas Hill, Pioneer Building, Montgomery street.  
Aleyon, g & s, Big Creek District.  
Aladin, g & s, Smokey Valley district.  
Apollo, g & s, Silver mountain district, I J Owens, 1 Armory Hall.  
Alhambra Hill, g & s, Summit district.  
Arch, g & s, Silver Mountain district.  
Atlanta, g & s, Devils Gate district.  
Alamo, gold and silver, Silver City, J F Pope, 113 California street.  
Antelope, Silver, Esmeralda District, S Patte, 522 Montgomery street.  
Alhambra Mining Co., Devil's Gate District, J O Stranch, 815 Sansome street.  
Aetna, Gold and Silver, Esmeralda District, Wm Winchester, Aurora, Mono county.  
Annie Laurie, gold and silver, Humboldt District, J H Gager, Merchant street.  
Adriatic, gold and silver, Flowery District, S B Rooney, 11 Government House.  
Albany East, gold and silver, Slate Range District, W H Clark, 522 Montgomery street.  
American, gold and silver, Virginia District, R L Taylor, 48 Metropolitan Block.  
Arcade, Esmeralda District, P B Oppenheim, Aurora, Mono county.  
Allen, Virginia District, R Rising, Virginia City.  
Bryan & Watson, gold and silver Lander County, W C Watson, Metropolitan Block.  
Bolivia, gold and silver. Gold Hill, N. T., N Shiverick, 605 Clay street.  
Buckeye, gold and silver, Cinnabar dist., Humboldt, G. Falskenstein, 426 Montgomery st.  
Black Mountain Copper Mining Co., Clayton Dist., R Emerson, 540 Clay street.  
Black Rock, gold, silver and copper, Contra Costa county, H C Kibbe, 542 Sac. street.  
Baron Rothschild, gold, silver and copper, Contra Costa county, H C Kibbe, 542: Sac. st.  
Blumenthal, gold and silver, Reese River, F H Rogers, 607 Washington street.  
B. B. Mining Co. I N Choynski.  
Beverly gold and silver, Reese River, John Gorman, 423 Battery street.  
Blue Ledge, g and s, Reese River Dist. 228 Front street.  
Black Ledge, g and s, Reese River Dist, 228 Front street.  
Baja California, silver, Lower California, Mexico, A Marcus, 519 Montgomery street.  
Big Tree, Silver Mountain Dist, T J Owens, 1 Armory Hall.  
Brilliant, silver, Slate Range Dist, John B Russell, 410 Montgomery street.  
Bunker Hill, gold and silver, Lander county, N. T., P N Edwards, Merchant St.  
Bullion G. & S. Mining Co., Ingo Dis, David Wilder, 522 Montgomery St.  
Bright Star, silver, Reese River, Metropolitan Block.  
Buckeye, gold and silver, Silver City, F S O rter, 415 Sansome street.  
Burning Moscow, silver, Virginia District, J P Nourse, cor. Montg'y and Jackson streets.  
Benjamin, g & s, Devil's Gate District, R N Van Brunt, 706 Montgomery street.  
Belfast, g & s, Devil's Gate district, J H Purkitt, 40 Metropolitan Building.  
Bullion, gold and silver, Russ District, David Wilder, 522 Montgomery street.  
Bright Star, gold and silver, Esmeralda District.  
Bullion, gold and silver, Van Horn District, T L Bibbins, 305 Montgomery street.  
Butte, gold and silver, Sierra County.  
Bella Vista, gold and silver, Lower California, S S Sprague, cor. Cal. and Sansome.  
Burnside, silver, Virginia District, E C Lovell, 436 Jackson street.



- Banner, gold and silver, Esmeralda District, R N Van Brunt, 706 Montgomery street.  
 Baltic, gold and silver, Gold Hill District, W W Coryell, Virginia City.  
 Best & Belcher, gold and silver, Virginia District, H E Woodruff, Gold Hill.  
 Buffalo, gold and silver, Green Horn District.  
 Bodie Bluff C. T. & M. Co., Bodie Mining Dis. Cal., J F Sterling, 33 Montgomery Block.  
 Brennus, gold and silver, Virginia District, D F Verdenal, 636 Clay street.  
 Bajazette & G. Era, gold and silver, Virginia District, R D Ferguson, Virginia City.  
 Bamboo, gold and silver, Esmeralda District, J W Gould, 406 Montgomery street.  
 Bodie No 2, gold and silver, Bodie District, Cal., A L Chamberlin, 413 Montgomery St.  
 Brayton, gold and silver, Humboldt District, Wm P Denkla, 413 Montgomery street.  
 Big Baby, gold and silver, Esmeralda District, E. Daniels, Express Building.  
 Blue Mountain, gold and silver, Calaveras Co., Hugo Dreschfeld, 24 Naglee's Building.  
 Bohemia, gold and silver, Mono Co.  
 Barker, gold and silver, Am. District, H. C., J S Luty, 305 Montgomery street.  
 Blue Ridge Mining Co., Slate Range District, G J Turner 606 Montgomery street.  
 Bohemia, gold and silver, Mono Co.  
 Barker, gold and silver, Am. District, H. C., J S Luty, 305 Montgomery street.  
 Blue Ridge Mining Co., Slate Range District, G J Turner 606 Montgomery street.  
 Buena Ventura, G. and S., Aurora, Mono Co., Wm V Garvey, 612 Merchant street.  
 Best Chance, gold and silver, Echo Dist., Nevada T., Geo. E. Phelan, 726 Montgomery St.  
 Brazier, gold and silver, Esmeralda District, T H Templeton, 550 Clay street.  
 Big Chief, gold and silver, Esmeralda District, P B Cornwall, 608 Merchant street.  
 Blue Ledge, gold and silver, El Dorado Co., A St E Denver, Coloma.  
 Benson, gold and silver,  
 Bamboo Chief, gold and silver, Silver mountain Dis., T J Owens 1 Armory Hall.  
 Bennington, gold and silver.  
 Buckeye, gold and silver.  
 Brennus, gold and silver, Devil's Gate District, F. W. Gross, 436 Jackson street.  
 Barclay & Smith Mining Co., gold and silver, Reese River, R. T. Polk, 56 Metropolitan Blk  
 Barnard, gold and silver,  
 Boston, copper,  
 Black Belt, gold and silver.  
 Brewster, gold and silver, Esmeralda District,  
 Baltimore American, gold and silver, J L Pool, 540 Washington street.  
 Black Bess, gold and silver.  
 Bay State Tunnel Co.  
 Big Tree, gold and silver, Amador Co., T J Owens, 1 Armory Hall.  
 Big Blue Lead, gold and silver.  
 Baltimore, gold and silver,  
 Bralley, gold and silver, Reese River District, J L Pool, 540 Washington street.  
 Black Rock, gold and silver,  
 Baron Rothschild, gold, silver & copper,  
 Battle Snake, gold and silver,  
 Byrd's Valley, quartz,  
 Baron, gold and silver,  
 Butler, gold and silver, Wm E Moody, 706 Montgomery street.  
 Broadhead, gold and silver, Thomas McCallan, 622 Clay street.  
 Birmingham, gold and silver,  
 Beverly Con'd copper, El Dorado Canon, J P Nourse, Lucas & Turner's Building.  
 Bigler, gold and silver,  
 Belknap Mining Co. F W Gross, 436 Jackson street.  
 Bunker Hill, gold and silver, Santa Clara District, W H Martin, 617 Clay street.  
 Buena Ventura Mining Co., Sonora, Mexico,  
 Barry Silver Mining Company, Slate Range District, Edward Barry, 636 Sacramento St.  
 Blue Ledge Lovell, silver,  
 Baltic Con., gold and silver, Smoky Valley, N. T.,  
 Barber, gold and silver, Thos. Brownjohn, 621 Clay street.  
 Black Mountain, copper,  
 Ben Franklin, gold and silver, Humboldt District, Jas Herrick, 606 Montgomery street.  
 Buena Vista Mining Co.  
 Big Cañon, gold and silver, Tuolumne county, J W Gould, 406 Montgomery street.  
 Barreteros Mining Co. Sinaloa, Mexico, F Vassault, 4 Bolton & Barron's Bldg.  
 Black Hawk, gold and silver, Silver Hill, Thos. McCallan, 622 Clay street.  
 Bonita, silver, F W Gross, 436 Jackson street.  
 Blanding, gold and silver, Virginia District, Henry Toomy, 402 Montgomery street.  
 Bay Copper, gold and silver, Clayton D. Con. Cos. S F Gilmore, 305 Montgomery street.  
 Boston Ravine, gold and silver,  
 Blue Comet, gold and silver,  
 Bexar Mining Co.  
 Burlington, gold and silver, Esmeralda District, J F Sterling, 33 Montgomery Block.  
 Blue Ledge, g & s, Kelsey district, I D Ingoldsby, 80 Merchant street  
 Boo, gold and silver, Silver Mountain  
 Big Giant, gold and silver, Lander county  
 Baltimore, gold and silver, Silver Mountain  
 Black Ledge, gold and silver, Reese River  
 Belfast, gold and silver, Devils Gate  
 Benjamin, gold and silver, Devils Gate  
 Clear Creek Silver Mining Co., Sierra Dis., N. T., John M Burnett, 536 Washington St.  
 Combination G. & S. Mining Co., Telescope Dis., David Wilder, 522 Montgomery St.  
 Clara G. & S. Mining Co., Ingo Dis., David Wilder, 522 Montgomery St.  
 Chilpanzingo, silver, Mexico, H C Kibbe, 542 Sacramento street  
 Consolacion, silver, Durango, Mexico, Michael Hawkins, 403 Pine street  
 Cumberland, copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sacramento  
 Chicago, g and s, Reese River Dist, 228 Front street  
 Cherokee, g and s, Echo Dist, Humboldt, L Franconi, Lucas & Turner's Building  
 Capitola, gold, silver and copper, Uvas Dist, Santa Clara co, D R Beckford, 328 Mont. St  
 Copper Age Mining Co., J W Crosby Montgomery St.  
 Cino de Mayo, gold and silver, C B Lafitte.  
 Clear Creek, silver, C Stevens, 505 Montgomery St.  
 Cuba, gold and silver, Humboldt N. T., E Flanagan, Naglees Building.  
 Columbus, gold and silver, C B Hart, 15 Metropolitan Block.  
 Cox and Rose G. & S. Mining Co., Reese River, Wm Hollis, 410 Montgomery street.  
 Chrysopolis G. & S. Mining Co., Silver mountain, Mono county, E C Lovell, 436 Jackson St  
 Copper Age M'n'g Co. Clayton dis., Contra Costa co, J W Crosby, 9 & 10, Govern'm't Hse  
 Contra Costa, g. s. & c., Contra Costa co., J W Crosby, 9 & 10 Government House.  
 Cammeron, gold and silver, Ohio dist., Humboldt, G Falkenstein 426 Montgomery street  
 Cal. Copper Smelting Works, Antioch, R Emerson 540 Clay street.  
 Columbia G., S. & C. Mining Co., La Paz, Arizona Ter., Gould, 530 Clay street.  
 Chautague, Silver Mining Company, Reese River, R N Van Brunt, 706 Montgomery street  
 Chrystal, g & s, Silver mountain district, J L Pool, 540 Washington street.  
 Consolidated, copper, Copperopolis, Richard Powning, Superintendent  
 Calaveras, copper, Copperopolis, Richard Powning, Superintendent.  
 Cuba, gold and silver, Humboldt district, E Flanagan, 8 Naglee's Building.  
 Cressus, silver and copper, El Dorado Canon,  
 Capiapo, silver, W P Dewey, corner Clay and Montgomery street.  
 Constantia Mining Co. Humboldt district, J H Gager, Montgomery B'ock.  
 Copper Hill Mining Co. Soledad district, Los Angeles, E Barry, 636 Sacramento street.  
 Crown Lead, gold, silver and copper, Mariposa County, John W Gould, 406 Montg. st.  
 Cinco Senores, gold and silver, Sinaloa, Mexico,  
 Chyno, gold and silver, Esmeralda district, D S Levy, Esmeralda.  
 Cincinnati, silver, Reese River district, P B Cornwall, 608 Merchant street.  
 Camanche, gold and silver, Sugar Pine district, A S Gould, 528 Clay street.  
 Cash, gold and silver, Palmyra district, A L Chamberlin, 413 Montgomery street.  
 Consolacion, silver, Durango, Mexico, M Hawkins, 403 Pine street.  
 Codicia Silver Mining Co. Gold Hill District, S B Rooney, Government House.  
 Carrazalita Silver Mining co. Gold Hill District, S B Rooney, Government House.  
 Clio, gold and silver, Tuolumne Co. J F Pope, 115 California street.  
 Cumberland Consolidated, gold and silver,  
 Central, silver, Virginia District G B McAneny, 712 Montgomery street.  
 California, silver, Virginia District, D W Young N E corner Montgomery and Jackson.  
 Carson River, gold and silver,  
 Cole, silver, Virginia District, W E Wood, 123 California street.  
 Cedar Hill Tunnel M Co. C L Farrington, 509 Sacramento street.  
 Copper and Silver City, gold and silver, Silver City, E H Platt, Virginia City.  
 Chenango Mining Co. W E Dean, 53 Montgomery Block.  
 Con. Silver Hill, gold and silver, Esmeralda District, S Pattee, 522 Montgomery street.  
 Crown Point, gold and silver, Gold Hill District, S B Rooney, 11 Government House  
 Chas Cany Mining Co. Devil's Gate District, Gomer Evans, 338 Montgomery street.  
 Combination, gold and silver, Telescope District, David Wilder, 522 Montgomery street  
 Consumes Mining Co. Sacramento Co. ———— Daylor's Ranch.  
 Carbon Hill, Mining Co. Virginia District, ———— Aurora, Mono Co.  
 Cape, silver, Esmeralda District, H S Sanders Aurora, Mono Co.  
 Crescent, gold and silver, Van Horn Dis. J S Luty, 305 Montgomery street.  
 Corcoran, gold and silver Esmeralda District, J Woodthorpe, 326 Clay street.  
 Carrie Bell, gold and silver, Esmeralda District, W L Duncan, Pioneer Hall.  
 Cedar, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
 Cook, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
 Cocheco Mining Co. Humboldt District, N B Mulville, 606 Montgomery street.  
 Caledonia, gold and silver, Gold Hill District, W B Agard, 412 Front street.  
 Chrysopolis, gold and silver, Virginia District, H Toomey, cor. Montg. and California.  
 Colorado gold and silver, La Paz, N M. R E Raimond, 515 Front street.  
 Cataragus, gold and silver, Slate Range District, A H Clark, 522 Montgomery street.  
 Clear Creek, silver, Washoe & Eagle District, U Stevens, 6 Parrott's Building.  
 Chrysopolis, silver, Mono County, J H Gager, Montgomery Block.  
 Collins, gold and silver, Esmeralda District,  
 Concert, gold and silver, Esmeralda District, Thomas Brownjohn, 621 Clay street.  
 Cayuga Mining Co. Slate Range District, G J Turner, 606 Montgomery street.  
 Cressus, gold and silver, Eagle & Washoe district, J P Nourse, Lucas & Turner's Building.  
 Christiana, gold and silver, Esmeralda district, J H Purkitt, 40 Metropolitan Block.  
 Chicago, gold and silver, Esmeralda district, J Woodthorpe, 326 Clay street.  
 Corinthian, gold and silver, Esmeralda district, J H Purkitt, Metropolitan block.  
 Colusa, gold and silver, Prince Royal district, M G Elmore, 528 Montgomery street.  
 Cedar, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Clemons, gold and silver, Esmeralda district, C E Buckingham, 607 Clay street.  
 Combination, gold and silver, Telescope district, David Wilder, 522 Montgomery street.  
 Chicago, gold and silver, Silver mountain district.  
 Cassandra, gold and silver, Esmeralda district.  
 Comet, gold and silver, Russ district, D Wilder, 522 Montgomery street.  
 Congress, gold and silver, Slate Range district, W W Lawton, 400 Montgomery street  
 Comstock, gold and silver,  
 Camille, gold and silver,  
 Coffee, gold and silver,  
 Constellation, gold and silver, Humboldt district, V B Post, Lucas & Turner's Building.  
 Casket, gold and silver,  
 Cleopatra, gold and silver, Wm H Watson, 607 Clay street.  
 Carico, silver, Reese River district, A S Gould, 528 Clay street.  
 Cassius, gold and silver, Buena Vista district, F R Jenkins, 80 Merchant street.  
 Cloud, gold and silver,  
 Caledona Tunnel, M Co. Gold Hill District, S B Rooney, Government House.  
 Columbia Mining Co.  
 Chilon, gold and silver, T B Robinson, 896 Front street.  
 Commonwealth, gold and silver,  
 Charles Cany Mining Co., Devil's Gate, Gomer Evans, 338 Montgomery street.  
 Carlton, silver and copper, Weaver District, C T, G J Turner, 606 Montgomery street.  
 Celestia, silver and copper, Weaver District, C T, G J Turner, 606 Montgomery street.  
 Chimney Rock, gold and s,  
 Curtis Mining Co. Reese River District, M R Wallis, 15 Metropolitan Block.  
 Converse & Munckton T C,  
 Cortez, gold and silver, minig co, Cor. dis, R N Van Brunt, 706 Montgomery street.  
 Congress, silver,  
 Commerce, silver  
 Cosmopolitan, gold and silver, Monitor district, Am Co. T J Owens, 1 Armory Hall.  
 Capital, gold and silver, Reese River district, M L McDonald, 34 Metropolitan Block.  
 Caycroft, gold and silver,  
 Cressus, gold and silver, Ormsby County, J H Gager, corner Montgomery and Merchant  
 Carson, silver,  
 Consolation, gold and silver, A H Griswold, Virginia City.  
 Crown Lead, g. s. and c., Colorado Ravine, Mariposa County, J W Gould, 406 Montg'y st.  
 Cosette, silver and copper, L Franconi, Lucas & Turner's Building.  
 Contra Costa, gold & silver, J W Crosby, Government House.  
 Cayuga, gold, silver and copper, Van Horn District, C W Curtis, 606 Montgomey street.  
 Chihuahua Mining Co,  
 Comet, gold and silver,  
 Constitution, gold and silver, Lander County, N T, J C Ford, 607 Washington street.  
 Cressus, gold and silver,  
 Cobra Rica Mining Co. Weaver district,  
 Cambridge, silver, F W Gross, 436 Jackson street.  
 Cabezon Mining Co.  
 Central American, g & s, Gold Hill district, J L Pond, 539 Washington street.  
 Chollar, silver, Virginia District W E Dean, 53 Montgomery Block.  
 Coso, silver, Coso District, D W Chambers, 11 Court Block.  
 Chicago and Detroit Consolidated, g & s, Monitor dis., H Dreschfeld, 24 Nagle's bid.



Calaveras, silver, Silver Mountain district  
Comstock, gold and silver, Alpine d, Am c.  
Clara, gold and silver, Inyo district  
Clay street, c and s, Red Mountain, N T

Daniel Webster, gold and silver, Devil's Gate Dis., Alex Stott, 512 Sansome St.  
Dubuque, gold and silver, H Pichor, cor. Jackson & Montgomery Sts.  
Diamond, gold and silver, C B Hart 15 Metropolitan Block.  
Die Vernon, silver, R T Polk, 56 Montgomery Block  
Diana, g and s, Reese River Dist, 228 Front street  
Don-phan, g and s, Humboldt Dist., N T, H C Kibbe, 542 Sac. street  
Desert Mining Co., Flowery Dis., N. T., David Wilder, 522 Montgomery St.  
Del Rey, Silver Mining Co., Devil's Gate Dis., N. T., David Wilder, 522 Montgomery St.  
Don Juan G. & S. Mining Co., Esmeralda Dis. David Wilder, 522 Montgomery St.  
De Soto, gold and silver, Star Dis. Humboldt, N. T., John M Burnett, 536 Washington St.  
Desert Mining Co., Flowery District, D Wilder, 522 Montgomery street.  
Dane, gold and silver, Devil's Gate District, A De Senailhac, Government House.  
Dios Padre, gold and silver, Sonora, Mexico, J T Nesmith, 502 Montgomery street.  
Doyle, gold and silver, Esmeralda district, J Woodthorpe, 326 Clay str et  
De Soto, gold and silver, Star district, R C Page, 428 Montgomery street.  
Danube, gold and silver, Esmeralda district, J H Purkit, 40 Metropolitan Building.  
Dane, gold and silver, Esmeralda district, J R Beard, 4 Armory Hall.  
Davis Consolidation, gold and silver, Esmeralda dist. C E Buckingham, Aurora, Mono, Co.  
Dayton, gold and silver, W H Watson, 607 Clay street.  
Donophan, gold and silver,  
Deposit, gold and silver, R Clark, 422 Montgomery street.  
Del Monte Cross Consolidation, gold and si ver,  
Dell, gold and silver, John Fowler, corner Clay and Battery.  
Del Rey, silver, Devil's Gate District, David Wilder, 522 Montgomery street.  
Dannebrog, gold quartz, Yuba County, C L Farrington, 528 Sacramento street.  
Don Pedro, gold and silver, Esmeralda district, J H Purkitt, 40 Metropolitan block.  
Dona Carolina, gold and silver,  
Dashaway, gold and silver, Esmeralda, J F Miller, 327 Montgomery street.  
Delta, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street.  
Dixon, gold and silver, Table mountain district, E Flanagan, 8 Naglee's Building.  
Douglas and Fillmore Con. gold and silver, San Francisco district, W Hollis, 410 Mont.  
Dawn Farm Quarry, Devil's Gate district  
Diana, gold and silver, Reese River  
Don Juan, gold and silver, Esmeralda  
Dowd, gold and silver, Lyon County  
Dimes No 2, gold and silver, Esmeralda district, J Armstrong, 610 Merchant street.  
Delaware, Virginia district, — Purdy.  
Detroit, gold and silver, Humboldt district, V B Post, Lucas & Turner's Building.  
Dundas, gold and silver, Devil's Gate  
Defiance, gold and silver, Gold Hill  
Delfina, copper, Sonora, Mexico  
Dexter Mining Co. Silver Butte district  
Dundas, gold and silver, Silver City District, J H Purkitt, 40 Metropolitan block.  
Del Monte Cross Con. G & S Mining Co., Esmeralda, Wm T Atwood, 224 Montg' street.  
Diamond, gold and silver, Reese River  
Douglas, gold and silver, Lander co  
El Dorado, gold and silver, Silver mtn dis.

Express Mining Co., Russ District, David Wilder, 522 Montgomery St.  
Eureka & Elizabeth Con. S. & C., Calaveras county, R F Roth, 515 Market St.  
Excelsior, G & S, Lander Co., N. T., N B Mulville, 606 Montgomery St.  
El Tesora S. M. Co., Lower California, H C Kibbe, 542 Sacramento street.  
Enterprise, g and s, Colorado Dist, New Mexico, R Clark, 422 Montgomery street  
El Dorado Consolidation, g and s, Devil's Gate Dist, Lyons co, N T, J F Pope, 13 Cal. St.  
Eclipse Tunnel Co, Humboldt, L Franconi, Lucas & Turner's Building  
E. L. Sullivan's Mining Company, San Francisco District.  
El Dorado, Con. gold and silver, J F Pope, 113 California Street.  
Emma Antonette, gold and silver, E Chevasus, 716 Montgomery St.  
Eastern Star, C W Hayden, 606 Montgomery St.  
Eureka, gold, Sampson Tams, 214 California St.  
Eastern G. & S. Mining Co., Reese River, Wm Hollis, 410 Montgomery street.  
Express, gold and silver, Palmyra district, J F Miller, 327 Montgomery street.  
Express, gold and silver, Silver City District, J. H. Purkitt, Metropolitan Block.  
Echo, g. & s. M. Co., Gold Hill district, N. T., N Shiverick 605 Clay street.  
Echo Extension, gold and silver, Gold Hill district, N. T., N Shiverick 605 Clay street.  
El Gran Roder Copper Mining Co., La Paz, Arizona Ter., R Emerson, 540 Clay street.  
Esmeralda, silver, Esmeralda district, S Pattee, 522 Montgomery street.  
Esmeralda 1st Extension N M Co. Esmeralda district, S Pattee, 522 Montgomery street  
Eastern Slope Mill & M Co. Silver City, J J Cushing, 727 Clay street.  
Excelsior Mill & M Co. Silver City, ——— Silver City.  
Early Dawn, gold and silver, Devil's Gate district, J H Brewer, 40 Montgomery street.  
Estrick, gold and silver, Esmeralda distict, T L Bibbins, 305 Montgomery street.  
Emmett, Geo. gold and silver, Esmeralda district, John Woodthorpe, 326 Clay street.  
El Dorado, gold and silver, Virginia district, Henry Toomey, corner Montgomery and Cal.  
Everett, gold and silver, Humboldt district, J H Gager, Montgomery Block.  
Empire, gold and silver, Silver City, B P Ridgway, Metropolitan Hotel.  
Empire, gold and silver, Esmeralda district, C H Wakelee, 612 Merchant street.  
Eltesoro, gold and silver, Lower California, H E Kibbe, 542 Sacramento street.  
Eagle Mining Company, J C Hoyt, N W corner Montgomery and Commercial.  
Emma, gold and silver, Dayton, Lyon Co. ——— Dayton, Lyon Co.  
Estrela, Del Monte, gold and silver, Humboldt district, J H Gager, Merchant street.  
Esmeralda, gold and silver, Buena Vista, H Co. J S Luty, 305 Montgomery street.  
East Antelope, gold and silver, Silver Hill district, J H Blood, 7 Montgomery Block.  
Empire Mill and Mining Co. Gold Hill district, G R Spinney, Metropolitan Block.  
Electrical, gold and silver, Esmeralda district, E Worth, 547 Washington street.  
El Alamo de San Antonio, S Antonio, L C  
El Taste, silver, Sonora, Mexico Francisco  
Elley, silver, Smoky Valley  
Eclipse Tunnel co Humboldt co  
El Tigre a Colorado, gold and silver, Durango, Mexico, C L Farrington, 528 Clay street.  
Enterprise, gold and silver, El Dorado Canon, R Clark, Lyceum Building.  
Exchange, copper, Del Norte county, H. S Dalliba, 604 Montgomery street.  
East Range, g and s, Humboldt co  
Enterprise, g and s, Colorado district  
Empire Mining and Tun. co, Humboldt co  
Emigrant No 2, g and s, Lyon co  
Eclipse Mining co, Reese River

Empire, gold and silver, Coso, J F Miller, 607 Washington street.  
Eureka, gold and silver, Silver mountain Dis. T J Owens, 1 Armory Hall.  
Enterprise, copper, Placer County, M G Elmore, 528 Montgomery street.  
El Paso, gold and silver, Esmeralda district, J F Sterling, 33 Montgomery Block.  
Esmeralda Spur, gold and silver, Esmeralda district, C W Curtis, 606 Montgomery street.  
Ethan Allen gold and silver, Reese River district, M L McDonald, 34 Metropolitan Block.  
Evangeline, gold and silver, Gold Hill district, N E Grimes, 4 and 5 Government House.  
Excelsior, gold and silver, El Dorado district, N T J L Pool, 540 Washington street.  
Eastern (front lead) M Co. Virginia district, J S Davis, 18 Montgomery Block.  
Evoca Consolidation, copper, Del Norte district, E Barry, 636 Sacramento st. eet.

Federal State G & S Mining Co., Middle Hill, Esmeralda district.  
Fidelity, g, s and c, Contra Costa Co., J A Woodson, Barron's Building, Merchant street.  
Fair Play, copper, gold and silver, Shay Gulch, J H Fry, Metropolitan Block.  
Federal and Republic, silver, Virginia district, N. T., N Sh verick, 605 Clay street.  
Fortune, gold and silver, Cinnabar dis., Humboldt, G Falkenstein, 426 Montgomery street.  
Figaro, gold and silver, Alpine Dis., Alex Stott, 512 Sansome St.  
Francis, silver, A H Clark, 522 Montgomery St.  
First South-east Extension, silver, Slate Range, A H Clark, 512 Montgomery St.  
Freymburg, silver, Gold Hill, J S Pool, 540 Montgomery St.  
Flume, g and s, Silver Mountain, T J Owens, 502 Montgomery street  
Flume Lodge, g and s, Montgomery Maze, Government House  
Franklin, G & S, Lander Co., N. T. H S Brooks, Government House.  
Falls of Clyde, gold and silver, Esmeralda district, W L Duncan, Pioneer Hall.  
Flowery Mill Co. Flowery district, James Peck, 707 Sansome street.  
Foundation M and Trust Co. Esmeralda district, A Davidson, Oakland, Alameda County.  
Franco-Americana, gold and silver, San Antonio, L C, A S Gould, 528 Clay street.  
Flyaway, gold and silver, Esmeralda district, P B Oppenheimer, Aurora, Mono County.  
Fulton, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
Federal Union, gold and silver, Esmeralda district, J T Baily, Metropolitan Block  
Franklin Tunnel Mining Co. Esmeralda district, P B Cornwall, 608 Merchant street.  
Frankfort, Esmeralda district, Jno M Burnett, 605 Montgomery street.  
Francis 1st S E Extension, gold and silver, Slate Range district, A H Clark, 522 Montg. st.  
Fillmore, gold and silver, Slate Range district, W W Lawton, 400 Montgomery street.  
Federal Hope Consolidation, gold and silver,  
Fort Pitt, gold and silver,  
Foundry, gold and silver, W W Wiggins, 608 Montgomery street.  
Fork, gold and silver, Blue Mountain district, W H Jessup, 33 Fremont street.  
Fort Point, gold and silver, El Dorado county J F Miller, 327 Montgomery street.  
Flor de San Antonio, gold and silver, John Fowler, Clay st. corner of Battery.  
Foundling, gold and silver, Wm E Moody, 706 Montgomery street.  
Felix, g & s, Devil's Gate District, William Willis, 712 Montgomery street.  
Fanny Read, silver, F W Gross, 436 Jackson street.  
Federal Republic, silver, Virginia District, N Shiverick, cor. Montgomery and Clay streets  
Fellows Quartz Mining Co., Sierra county, L Franconi, Lucas & Turner's building.  
Falstaff Mining Co., J T Bailey, Metropolitan Block:  
F C Loomis, gold and silver, Gold Hill district, S T Steele, Virginia City.  
Flor Nightingale, gold and silver, Esmeralda  
Fairchild, c, gold and s, Spring Valley  
Forest Queen, gold and silver G Mogul dis  
"420" Mining co, Virginia district  
Favorite Mining co, Virginia district  
Flowery, Flowery District, J G Gilchrist, Virginia City.  
First S. Chihuahua Mining Co., Esmeralda District, W W Lawton, 400 Montgomery St.  
Federal Hope, gold and silver, Esmeralda District, Thos. Brownjohn, 621 Clay street.

Golden Era, gold and silver, C B Hart, 15 Metropolitan Block.  
General Kibbe G. & S. Mining Co., Esmeralda Dis., David Wilder, 522 Montgomery St.  
Great Central Mining Co., H C Repps, 542 Sansome St.  
Golden Wedge, silver, Gold Hill, N Shiverick, 605 Clay Street.  
Great Western Tunnel Co., Esmeralda Dist, James C Ford, 607 Washington street  
Grissim Consolidation, W C Budd, 607 Washington street  
Granite Copper Mining Co, Contra Costa county, F H Rogers, 607 Washington street.  
Great Chieftan G & S Mining Co., Smokey Valley Dis., T Wetzel, ——— street.  
Great Republic, gold and silver, Silver City District, J H Purkitt, Metropolitan Block.  
Golden Gate, silver, Gold Hill distr. N. T., N Shiverick, 605 Clay street.  
Golden Hedge, gold and silver, Gold Hill dist. N. T., N Shiverick 605 Clay street.  
Golden Magnet, gold and silver, Cinnabar dist. Humboldt, G Falkenstein, 426 Montg'y. st.  
Golden Wedge G & S Mining Co., Esmeralda Dist, Wm T Atwood. 224 Montgomery St.  
Gen. Jackson, gold and silver, Devil's Gate Dis., Alex Stott, 512 Sansome St.  
Great Western Tunnel & Mining Co., Esmeralda, Joseph C. Ford, 607 Washington street.  
Great Central Min'g Co., Colorado River, A. T., H C Kibbe, 542 Sac. street  
Guadalupe, silver, Chihuahua, Mexico, Wm Blackwood, 742 Washington street.  
Gould & Curry, gold and silver, Vir'a Dist, J C L Wadsworth, Lucas & Turner's building.  
Good Hope, Nevada Territory, D Davidson, 338 Montgomery street.  
Great Central Mining Co., J W Collins, 326 Clay street.  
Garibaldi, gold and silver, Esmeralda Distr'ct, J T Nesmith, 10 Armory hall.  
Gazelle, gold and silver, Esmeralda District, Daniel Clark, Court Block.  
Governor, Devil's Gate District.  
Gold Hill Union Mills, gold and silver, Gold Hill Dist, J F Sterling, 33 montgomery block  
Great Western Mining Co., Coso Dist., Tulare Co., Barclay Henley, Express Building.  
Gen. Grant, gold and silver, Esmeralda District.  
Gen. Jackson, gold and silver, Esmeralda District, P B Oppenheimer, Aurora.  
Golden Age, gold and silver, Humboldt District, A L Chamberlin, 413 Montgomery St.  
Green, gold and silver, Gold Hill Dist.  
Governador, silver, San Antonio, L C., C W Hayden, 606 montgomery street.  
Gov. Seymour, gold and silver, Reese River district, D B Francis, 228 Front street.  
Gen. Hooker, gold and silver, Virginia district, J H Brewer, 40 Montgomery block.  
Guadalupe de Los Angeles, gold and silver, L A Sanderson, 1 Armory hall.  
Georgiana, gold and silver, Slate Range District, W W Lawon, 400 Montgomery street.  
Golden Era, silver, F W Gross, 436 Jackson street.  
Gen. Hooker, gold and silver.  
Golden Age and Emp., gold and silver,  
Gen. Hooker East, gold and silver.  
Golconda, gold and silver, Reese River District, M L McDonald, 34 Metropolitan block.  
Great Western Tunnel & Mining Co., Coso district, W W Lawton, 400 Montgomery St.  
Gov Stanford, gold and silver,  
Golden Wedge, silver, J P Nourse, Lucas & Turner's building.  
Gold Hill Quartz Mill & Mining Co., Gold Hill district, Wm V Garvey, 619 Merchant St.  
Gould & Curry No 1 Mining Co.



Globe, gold and silver, Wm. H. Watson, Aurora. }  
 Grand Turk, gold and silver, Wm H Watson, Aurora. } Or to C. T. Buckingham,  
 Gray Eagle, gold and silver, Wm H Watson, Aurora. } 528 Clay street, San Francisco.  
 Gem, gold and silver, Esmeralda district, T Flitcroft, 617 Clay street.  
 Gildersleeve, gold and silver.  
 Good Hope, gold and silver.  
 Great Eastern, g and s, Silver Mountain  
 Gov. Downey Con. g and s, Humboldt co  
 G ld Bluff Mining co, Humboldt co  
 Geo. Washington, g and s, Oro Fino dis  
 Gen. Hill, silver, Summit district  
 Great Chieftain, g and s, Lander co  
 Gortha Mining Co, Esmeralda district, J H Parkitt, 40 Metropolitan Building.  
 Green Rock Mining Co, Angel's Camp, E A Breed, cor Jackson and Montgomery streets.  
 Griffin Tunnel Co,  
 Graham, gold and silver.  
 Gov. Potter, gold and silver,  
 Geraldine, gold and silver.  
 Gold Hill, silver.  
 Grizzly Hill Consolidated Tunnel Co.  
 Galvin Mining Co., Esmeralda district, F. H. Rogers, 607 Washington st.  
 Golden Age, gold and silver,  
 Golden Era Mining Co., E C Lovell, 436 Jackson street.  
 Gold Hill Big Ledge Mining Co., Wm Willis, 712 Montgomery street.  
 Green Monster, gold and silver.  
 Great Eastern, gold and silver, Virginia District, L F Yates, South C. St., Virginia City.  
 Gila, gold and silver.  
 Gov. Nye, gold and silver, Devil's Gate district, Geo. M Blake, 5 Government house.  
 Golden Rule Mining Co., Tuolumne Co, J B Russell, 410 Montgomery street.  
 Gem of Nevada, gold and silver, Wm Willis, 712 Montgomery street.  
 Granite Rock, gold and silver, Cedar Hill district, T Brownjohn, 621 Clay street.  
 Green Rock Tunnel Co., Esmeralda district, L D Ingoldsby, 80 Merchant St.  
 Great Basin Mining Co., Humboldt district, J H Blood, 7 Montgomery Block.  
 Geo. Emmet, gold and silver, Esmeralda district, J Woodthorpe, 326 Clay street.  
 Grey Ledge, gold and silver, Murphy's district, M G Elmo e, 528 Montgomery street.

Humboldt Tunnel Co., gold and silver, Esmeralda, F H Rogers, 607 Montgomery street.  
 Harrison Coal and Plaster Mining Co., San Mateo county, J F Miller, 327 Montgomery St.  
 Hydraulic mining co, Contra Costa co., Montgomery Maze, 9 & 10 Government House.  
 Humboldt Great Consols, Humboldt, R F Van Brunt, 706 Montgomery street.  
 Horse Shoe, silver and copper, Mont Diablo, Alex Stott, 512 Sansome street.  
 Hope, gold and silver, O B Hart, 15 Metropolitan Block.  
 Honest Miner, gold and silver, Reese River Mining District, 228 Front street  
 Horse Shoe, silver and copper, Alex Stott, 512 Sansome St.  
 Humboldt Great Consols Mining Company, R N Van Brunt, 706 Montgomery St.  
 Humboldt G. & S Mining Co., Russ District, David Wilder, 522 Montgomery St;  
 Harry Raymond G. & S. Mining Co., Oro Fino Dis. John M Burnett, 536 Washington St.  
 Hornitas, gold and silver, Mariposa county, ——— Washington street.  
 Harris, gold and silver, Esmeralda district, Hugo Dreschfeld, 24 Naglee's building.  
 Harmon, gold and silver.  
 Higgins' Hope, gold and silver, San Francisco Co., Hugo Dreschfeld, 24 Naglee's building.  
 Harker, gold and silver, Reese River district, 228 Front street.  
 Haral, gold and silver, Sinaloa, Mexico, W H Martin, 617 Clay street.  
 Humboldt Mining Co., Galena district, G O'Hara Taaffe, 430 California street.  
 Hornet Mining Co., Virginia district, C H Light, Virginia City.  
 Hope Mining Co., Gold Hill district, F W Gross, 436 Jackson street.  
 Hale & Norcross, silver, Virginia district J F Lightner, Metropolitan block.  
 Harrison, gold and silver, Flowery district, Henry Toomey, N E cor Mont. and Cal. St.  
 Hazel Green, gold and silver, Virginia district, T Brownjohn, 621 Clay street.  
 Heath, gold and silver, Esmeralda district, H D Bequette, Aurora.  
 Hawley, gold and silver, Devil's Gate district, C Stevens, 6 Parrott's building.  
 Humboldt Mining Co., Galena district, J L Pool, 540 Washington street.  
 Hattie, gold and silver, Esmeralda district, J H Parkitt, 40 Metropolitan Block.  
 Hope, gold and silver, Prince Royal district, L Franconi, Lucas & Turner's building.  
 Hermine, gold and silver, Esmeralda district, C H Wakelee, 612 Merchant street.  
 Hayes, gold and silver, Slate Range district, C H Wakelee, 612 Merchant street.  
 Halleck, gold and silver, Great Mogul district, J L Pool, 540 Washington street.  
 Humboldt, gold and silver, Russ district, D Wilder, 522 Montgomery street.  
 Heckendorn, gold and silver, Blue mtn., Calav. Co., C C Bowman, 726 Montgomery street.  
 Hebe, gold and silver, Reese River district, Wm V Garvey, 619 Merchant street.  
 Hudson Mining Co., Gold Hill district.  
 Highland, gold and silver, Humboldt district, Wm A Cornwall, 528 Clay street.  
 H Raymond, gold and silver.  
 Halias, gold and silver.  
 Harrison, gold and silver, Geller Ledge, L F Yates, Virginia City.  
 Halsted, gold and silver,  
 Herzo Consolidation, gold and silver.  
 Hensley, silver and copper, Weaver district, C. T., G J Turner, 606 Montgomery street.  
 Holdridge, gold and copper.  
 Humboldt Canal Mining Co., Humboldt dist, E A Breed, cor. Jackson and Mont'y Sta.  
 Hartford Tunnel and Mining Co., R Clark, Metropolitan Block.  
 Hudson, gold and silver, Devil's Gate District, J L Pool, 540 Washington street.  
 Hartford Mining Co., Gold Hill district, J S Davies, 18 Montgomery block.  
 Hobson Con. cop. mining co, Santa Clara co.  
 Harris Bros. g and s, Blue Mountain  
 Harriet Lane, g and s, Nevada Ter  
 Hutchinson, gold, silver and copper  
 Henrietta and Sophia Mining Co. Lower Cal  
 High Peak Tunnel and Mining Company.

Ida G. & S. Mining Co., Russ District, David Wilder, 522 Montgomery St.  
 Ina Ledge, gold and silver, Devil's Gate Dis., J Mulville 506 Jackson St.  
 Illinois Tunnel and Mining Co., Esmeralda Dist, J F Pope, 113 Cal. street  
 I X L, gold and silver, Arizona, N B Mulville, 606 Montgomery St.  
 Isaacs, gold and silver, Esmeralda district, Jas. Neary, 326 Clay steert.  
 Independence Quartz Co.  
 Iowa, mining co. Virginia district, R N Van Brunt, 706 Montgomery street  
 Ida, gold and silver, Russ district, David Wilder, 522 Montgomery street.  
 Indian Queen, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Ida, gold and silver, Lower California.

Insurance Mining Co., Jas Gallagher, 706 Montgomery street.  
 Inadianola, gold and silver, Humbolt District, J F Pope, 113 California street.  
 Iowa, gold and silver, C V Hobart, 505 Montgomery street.  
 Indian Queen, gold, El Dorado Canon.  
 Irataba, silver and copper, Weaver District, G J Turner, 606 Montgomery st.  
 Indus, gold and silver.  
 Indian Chief Lode Mining Co.  
 Indian, gold and silver, John C Leconey, Virginia City.  
 Indiana, silver  
 Independent gold and silver, Argentine District, E E Phillips, Virginia City.  
 Ironclad, gold and silver, El Paso District, Edward Barry, 636 Sacramento st.  
 Imperial, gold and silver, Gold Hill, C T Hopkins, 405 Front st.  
 Irving, gold and silver, Virginia District, M L Winn, 542 Sacramento st.  
 Imperatrice Eugenie, gold and silver, Calaveras Co. J Woodthorpe, 326 Clay st.  
 Independence, g and s, San Francisco dis  
 Isabel, gold and silver, La Paz  
 Illinois, gold and silver, Silver mountain dis  
 Impression, gold and silver, Garden Bar dis  
 Inyo, gold and silver, Inyo district  
 Intrepid, gold and silver, Yuba co.  
 Isabel and Agnes Land, g and s, Humboldt d

Jura, gold and silver, John Hunt, Jr., 3 U. S. Court Building.  
 Jackson, copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sacramento  
 Jefferson, copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sacramento  
 Joe Lane, gold and silver, Reese River Mining District, 228 Front street  
 Joe Douglas G. & S. Mining Co., Reese River Dis., R T Polk, 56 Montgomery Block.  
 Jefferson, gold and silver, Slate Range, J F Miller, 607 Washington street.  
 Jackson, gold and silver, Esmeralda District, ———, Aurora.  
 Josephine, gold and silver, Coso District, W W Lawton, 400 Montgomery street.  
 Jewel, gold and silver, Devil's Gate District, Cha's Gardner, Barron's Build. Merchant str.  
 Jack Hayes, gold and silver, Esmeralda District, J H Blood, 7 Montgomery block.  
 Jefferson, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
 Jason Mining Co. Si rra and Nevada Co. L Maubee, 716 Montgomery street.  
 Jenny Lind Mining Co. Esmeralda District, P B Cornwall, 608 Merchant street.  
 Juniata West Mining Co. P Basche, Silver City.  
 Joe Hooker Mining Co.  
 Jefferson, gold and silver, Silver City, E N Bashford, Silver City.  
 Jejeebboy, gold and silver, Santa Clara District, W Sparrow, 543 Clay street.  
 Juniata, gold and silver.  
 James River, gold and silver, John Gorman 423 Battery street.  
 Josephine, copper, Calaveras Co. T Brownjohn, 621 Clay street.  
 Julius, gold and silver, Reese River District, L Franconi, Lucas & Turner's buid'ing.  
 Juno, gold and silver, Esmeralda district, M G Elmore, 528 Montgomery street.  
 J C Fremont, gold and silver, Silver Mount.  
 Julius, gold and silver, Reese River  
 Joe Lane, gold and silver, Reese River  
 Jum, gold and silver, Esmeralda  
 Jefferson, gold and silver, Reese River  
 Janesville, gold and silver, El Dorado co.  
 Jefferson Galena, g and s, Plumas Co.

Knickerbocker and Monumental Consolidation, gold and silver, ———, Contra Costa  
 Keystone, copper, Copperopolis, Calaveras county, Joseph Powning, Secretary at the mine.  
 Kentucky, gold and silver, Contra Costa, Cal., H C Kibbe, 542 Sac street  
 King, g and s, Reese River, E C Palmer, Government House  
 Keetz, gold, Tuolumne county, H C Kibbe, 542 Sac. street  
 Knickerbocker, gold and silver, Jas Peabody, 542 Sacramento.  
 Kinderhook, gold and silver, A Falk, 605 Sacramento St.  
 Kay Quartz Lode, Zenas Coffin.  
 Kohinoor, g and s, Big Creek district  
 Kate Oliver, gold and silver, Argentine dis.  
 Kinsman, gold and silver, Santa Clara co.  
 Kelsey, gold and silver, El Dorado co.  
 Kohler, gold and silver, Reese River  
 Kohler Bros. silver, San Antonio, L. C., Kohler Bros. Sansome street.  
 Kohler, gold and silver, Esmeralda District, James Neary, 326 Clay street.  
 Keokuk, gold and silver, Esmeralda District, C H Wakelee, 612 Merchant street.  
 Kate, gold and silver, Prince Royal District, L Franconi, Lucas & Turner's building.  
 Kay Quartz Lode Mining Co. Slate Range District, L R Love, Custom House.  
 King David, gold and silver, Esmeralda District, T Brownjohn, 621 Clay street.  
 Kenosh, gold and silver.  
 Katy Wakeman Ledge Mining Co. Washoe District.  
 Kemp, gold, silver and copper.  
 King, gold and silver.  
 Keokuk, copper, A B Winegar, 322 Front street  
 Keltz, copper, Tuolumne Co. H C Kibbe, 542 Sacramento street.  
 Kentucky, gold, silver and c pper.  
 Kohler Bros. silver.

Los Angeles Con. copper, Solidad Mining District, Alfred Densmore, San Francisco.  
 La Libertad S. M. Co., Lower California, H C Kibbe, 542 Sacramento street  
 La Candelaria S. M. Co., Lower California, H C Kibbe 542 Sacramento street  
 Louisville, g and s, Humboldt Dist., N T, H C Kibbe, 542 Sac. street  
 Lochinvar Mining Co., Gopher Dist, Calaveras county, A Marcus, 519 Montgomery street  
 Lebanon copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sacramento  
 Lilly of the West, G & S, Esmeralda, R Robinson, 636 Sacramento St.  
 Lightner, gold and silver, C B Hart, 15 Metropolitan Block.  
 Lady Adams, gold and silver, Reese River, R T Polk, 56 Metropolitan Block.  
 Lady Elizabeth, gold and silver, Silver mountain, J A Woodson, Barron's b'g. Merchant St.  
 La Naud, gold and silver, San Francisco District, S W Corny, 410 Montgomery street.  
 Lady of the Lake G. & S. Mining Co., San Francisco Dis. Wm Hollis 410 Montgomery St.  
 La Plata Mining Company, Gold Hill district, N. T., N Shiverick, 605 Clay street.  
 La Gloria, gold, silver and copper, Ed Chevassus, 617 Montgomery street.  
 La Mina de la D Prov, gold and silver.  
 Lady Washington, silver, Virginia, N Shiverick, cor Montgomery and Clay.  
 Lady Franklin, silver, Virginia, N Shiverick, cor Montgomery and Clay.  
 Lone Star, silver, Esmeralda District, A Hanke, Aurora.  
 La Mariposa de G'a, gold, silver and copper.  
 La Luz Mining Co.  
 Lady Ann, gold and silver.  
 Lady Adams, silver.



Lafayette, gold and silver, Gold Hill District, Wm E Moody, 706 Montgomery street.  
 Lucerne Mining Co. Gold Hill District, J S Paxson, City hall.  
 Lytton Mining Co. Genoa District.  
 Lady Bryan, gold and silver, Flowery District, John T Bailey, metropolitan block  
 Latirobe Tunnel and Mining Co. Virginia District, R N Van Brunt, 706 Montgomery st.  
 Live Yankee, gold and silver, Esmeralda District, J A Moultrie, Aurora.  
 La Plata Mining Co. Esmeralda District, H S Sanders, Aurora.  
 Livingston, gold and silver, Esmeralda District, Jas Neary, 326 Clay street.  
 La Amistad, gold and silver, Santiago, L C., A de Senaillac, cor Montgomery & Jackson.  
 Los Cruzcitas Mining Co. Sonora, Mexico, C J Brenham, cor Jackson and Front streets.  
 City of the West Mining Co. Esmeralda District, T L Bibbins, 305 Montgomery street.  
 Laurel Hill Mining Co. Tuolumne Co. Jno B Russell, 410 Montgomery street.  
 L y Dale, gold and silver, Silver Hill, J R Beard, 4 Armory Hall.  
 Los Angeles Con. gold and silver, Soledad District, Alfred Dennoe, 104 California street.  
 Lloyd, gold and silver, Esmeralda District, Isaac Tabor, 7 Armory Hall.  
 Lexington Tunnel Co. Star District, Chas E Judd, montgomery strett.  
 Loyal, gold and silver, Esmeralda District, W F Hitchcock, 7 Mead House.  
 Lowman, gold and silver, Virginia District, Wm Knight, 414 Front street.  
 Lady Franklin, copper, Tuolumne Co. G J Turner, 606 Montgomery street.  
 Live Yankee, gold and silver, Slate Range District, W W Lawton, 400 Montgomery street  
 Lady Washington, gold and silver, Slate Range D, W W Lawton, 400 Montgomery street  
 La Plata Mining Co.  
 Lady Tucker, gold and silver.  
 La Blanch, gold and silver.  
 Luna, gold and silver, Esmeralda District, T Brownjohn, 621 Clay street.  
 Lafayette Mining Co. James Gallagher, 706 Merchant street.  
 Loyal, gold and silver, Humboldt Co. F Vassault, corner Montgomery and Merchant.  
 Lander Co. gold and silver, Reese River District, A S Gould, 528 Clay street.  
 Livingston, gold and silver.  
 Louisville, gold and silver, Humboldt District, H C Kibbe, 542 Sacramento street.  
 Lake Mining Co.  
 Lord Byron, gold and silver, Esmeralda District, H B Congdon, 621 Montgomery street.  
 Los Posos, gold and silver, La Paz District, T Brownjohn, 621 Clay street.  
 Lafayette, gold and silver.  
 Louisa, gold and silver, Silver City, J F Pope, 115 California street.  
 Lexington Mining Co.  
 La Belle Franco, gold and silver.  
 Loomis, gold and silver, Prince Royal District, W Sparrow, 543 Clay street.  
 La Palma, silver, San Antonio, L C., J W Gould, 406 montgomery street.  
 Lulu, copper and silver, Weaver District, G J Turner, 606 Montgomery street.  
 Long Tom, gold and silver.  
 Lake Superior, copper, Santa Clara  
 Lone Star, gold and silver, Silver mountain  
 Lucky Star, silver, Silver Mountain  
 Lumar Consolidation, g and s, Esmeralda  
 Lennox, g and s, Slug Gulch, El Dorado co.  
 Live Oak, copper, Gopher, Calaveras Co. J H Gager, Merchant street.  
 Lancaster Mill and Mining Co. Humboldt Co. N. T., C Wetzler, 320 Montgomery street.  
 La Blanca Mining Co. Sonora, Mexico, Chas Frieberg, 408 Clay street.  
 Lone Star Mining Co. Reese River, A L Whitney, 602 Washington street.  
 La Esperanza, Arizona, C A Eastman, 726 Montgomery street.  
 La Providencia Silver Mining Co. Copalo, Sinaloa, Frank W Gross, 436 Jackson street.  
 La Mina del Norte Silver Mining Co. San Antonio, L C., Henry Van Pelt, 436 Jackson.  
 La Mina Ophir Silver Mining Co. San Antonio, L C. Henry Van Pelt, 436 Jackson street  
 Lizzie Leighton, Consolidation; Esmeralda District, J R Beard; 4 Armory Gall.  
 Lady Ellen, g & s, Silver City District, L D Ingoldby, 80 Merchant street.  
 Longley, gold and silver, San Francisco district, A. T., S H Corey, 410 Montgomery street.  
 Luncock Mill and Mining Co. Storey co.  
 Logan, silver.  
 La Sinaloa, silver, Sinaloa, Mexico  
 Leo, gold and silver, Gold Hill  
 Minnesota G & S Mining Co. No 1, Gold Hill Dis., Munro Thompson, Virginia City.  
 Mount Carmel, gold and silver, Argentine District, J H Purkitt, 40 Metropolitan Block.  
 Iona, gold and silver, Silver City District, J H Purkitt, 40 Metropolitan Block.  
 Mt. Vernon, g. s. & c. M. Co. Murphy's, Calav. Co. Montgomery Maze, 9 & 11 Gov't House  
 Macdonald, G., S., and C. M. Co., Contra Costa, Montgomery Maze, 9 & 11 Gov't House  
 Mount Etna, silver and copper, Arizona Dis., C W Hayden, Montgomery St.  
 Mountain Queen, gold and silver, Reese River, John Gorman, 423 Battery street  
 Mandot, copper, H L Henschel 508 Battery St.  
 Monitor, gold and silver, Reese River Dist, 228 Front street  
 Maximilian, copper, Weaver District, Colorado River, A Marcus, 519 Montgomery street  
 Mammoth, g and s, Humboldt Dist., N T, H C Kibbe, 542 Sac. street  
 Mount Carmel, gold and silver, J H Purkitt, Lyceum Building.  
 Mountain View, gold and silver, Calaveras county, O L Taylor 22 Montgomery St.  
 Morning Star, gold and silver, Great Mogul Dis., C M Conro 717 Battery St.  
 Milwaukie, gold and silver, Slate Range, James Hitchings, 13 Mead House.  
 Madraza, gold and silver, A Martinon, 811 Montgomery St.  
 McClelland, gold and silver, Olando Loucks, 11 Clay St.  
 Minervia and Gittels Con., Hugo Dreschfeld, Naglees Broadway.  
 Monitor, copper, C. Stevens, 505 Montgomery St.  
 Magdalena, gold and silver, Edwin Harris.  
 Monte Albano G. & S. Mining Co., Esmeralda Dis., David Wilder, 522 Montgomery St.  
 Martinez, gold and silver, Reese River Dis., John W Gould, 406 Montgomery St.  
 Mount Vernon, gold silver & copper, Clayton district, Montgomery Maze, Government house.  
 Mt. Davidson, gold and silver, Virginia district, F A Fabens, 47 Montgomery block.  
 Meredith, gold and silver, Virginia district, E B Holmes, 712 Montgomery street.  
 Mayflower, gold and silver, Esmeralda district, W L Duncan, Pioneer building.  
 Mormon, silver.  
 Mina Prieta, silver, Sonora, Mexico, J P Nourse, Lucas & Turner's building.  
 Manzanillo, silver, Sinaloa, Mexico, — Eddy, 616 Merchant street.  
 Moss, gold and silver, Virginia district, R C Page, 428 Montgomery street.  
 Montezuma Tunnel and Mining Co. Esmeralda district, Aurora.  
 Mt. Braly Summit, gold and silver, Esmeralda district, P B Oppenheim, Aurora.  
 Monroe, gold and silver, Grass Valley.  
 Monarch, gold and silver, Virginia district.  
 Madison, gold and silver, Virginia district, P B Cornwall, 608 Merchant street.  
 Monterey, gold and silver, Devil's Gate district.  
 Elones and Stanislaus, gold, silver and copper, Calaveras, Geo. Congdon, 629 Commercial  
 Athews gold and silver, Esmeralda District, E Worth, 547 Washington street.  
 Merchant and Miners, gold and silver, Nevada Territory, M Lichenstein, Virginia City.  
 Misidora, silver, Sonora, Mexico, F H Waterman, 618 Marchant street.

Mohave, gold and silver, Lower California, G S Turner, 606 Montgomery street.  
 Mountain View, gold and silver, Slate Range district, W H Clark, 224 Montgomery street  
 Morrow East, gold and silver, Slate Range, district, W H Clark, 224 Montgomery street.  
 Milwaukie, gold and silver, Slate Range district, W H Clark, 224 Montgomery street.  
 Montrose, gold and silver, Esmeralda district,  
 Mount Hope, silver, Virginia district, Thomas Brownjohn, 621 Clay street,  
 Mono Tunnel and Mining Company, Esmeralda District, L D Ingoldby, 80 Merchant str't  
 Manhattan gold and silver, Humboldt district, J H Gager, Montgomery Block.  
 Mayflower, gold and silver, Star District, J A Drinkhouse, 228 Front street.  
 Mason, gold and silver, Esmeralda district, J A Drinkhouse, 228 Front street.  
 Mammoth Tunnel and Mining Company, Esmeralda district J A Drinkhouse, 228 Front st  
 Marmion, copper, gold & silver, Mariposa district, J T Hoyt, 415 Montgomery street.  
 Madison, gold and silver, Slate Range district, G J Turner, 606 Montgomery street.  
 Madison, gold and silver, Slate Range district, G J Turner, 606 Montgomery street.  
 Miller, gold and silver, Esmeralda district, Isaac Tabor, 7 Armory Hall.  
 Madison, gold and silver, Silver Mountain district.  
 Montezuma, gold and silver, Reese River district.  
 Mammoth No. 1, gold and silver, Esmeralda district, J R Beard, 4 Armory Hall.  
 Magna Charta, gold and silver, Humboldt, C E Judd, 523 Montgomery St.  
 Monitor, gold and silver, Slate Range district, John Crowley, 428 Montgomery street.  
 Mammoth, gold and silver, William E. Moody, 706 Montgomery street,  
 Monte Cristo, silver, Virginia district, E B Holmes, 712 Montgomery street.  
 Minebaha Mining Company.  
 Montreal Tunnel and Mining Co., Esmeralda district, J H Blood, 7 Montgomery Block.  
 Moulder, gold and silver,  
 Minona, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Manhattan Mining Co., Edward Franklin, corner of Montgomery and California streets.  
 Monadnock, gold and silver, Sugar Pine district, A S Gould, 528 Clay street.  
 Moonlight, gold and silver.  
 Montague, gold and silver.  
 Mallard Consolidated Mining Company.  
 Minnesota Consolidated Mining Company.  
 Maria, silver.  
 Minerva, gold and silver, Gild Hill district, L D Ingoldby, cor. Merchant and Montg'y sts  
 Mount Etna, silver and copper.  
 Muy Rico, silver and copper, Weaver District, Arizona, N B Mulville, 606, montgomery st.  
 Mount Vernon, gold and silver, Esmeralda, R Clark, metropolitan Block.  
 Magnolia, gold and silver, Prince Royal district, mmboldt, Chas E Judd, 523 montg'ry st  
 Marion, gold and silver.  
 Mountain Tunnel.  
 Mammoth, silver, Humboldt district, H C Kibbe, 542 Sacramento street.  
 Morning Star, silver, Great Mogul District, C M Conro, 623 Merchant street.  
 Malta, silver, Gold Hill district, A L Chamberlain, 413 Montgomery street.  
 Merchant, silver, Esmeralda district, J F Sterling, 33 Montgomery Black.  
 Mantol, copper.  
 Montgomery, gold and silver, Kern River district, G. J. Turner, 606 Montgomery street.  
 Marble Valley, gold and silver, Ohio district, El Dorado Co., D F Verdenal, 6 Court Block  
 Minnesota, gold and silver.  
 Mary L. Gardiner, Esmeralda.  
 Morning Star, gold and silver, Virginia City, N. T., Wm. A M Van Bokelen, Va. City.  
 Montezuma, gold and silver, El Dorado Canon.  
 Meredith, gold and silver.  
 Mariana, gold and silver.  
 Montgomery Mining Co., g. and s., Monitor dis., Amador, T J Owens, 1 Amory Hall.  
 Mechanics', gold and silver, A B Winegar, 322 Front street.  
 Madrago, gold and silver.  
 Monte Christo, gold and silver, Palmyra district, N. T., M W Weill, 630 Sacramento street  
 Monte Christo, silver, Kern River district G J Turner, 506 Montgomery street.  
 Mountain, gold and silver, W E Moody, 706 Montgomery street.  
 Miller Gold and Silver Mining Co., Smoky Valley, R. R., F W Gross, 436 Jackson street.  
 Manaulana, gold and silver.  
 Mount Washington, gold and silver.  
 Metropolitan, copper, Calaveras County, P B Cornwall, 608 Merchant street.  
 Monte Leone, G & S, P N Edwards, Barron's Building.  
 Mina Prieta, copper.  
 Murphy's Gulch Mining County, Amador County, C O Bowman, 726 Montgomery street.  
 Madison, gold and silver.  
 Mathewson, gold and silver.  
 Mina Rica de las Flores Mining Company. A DeTavel, S. W. cor. ont'y & Jakson Sts.  
 Moran, gold and silver.  
 Morgan, gold and silver.  
 Margarita, silver and copper, Soledad district, L Franconi, Lucas & Turner's Building.  
 Madison, gold and silver, Virginia, P B Cornwall, 608 Merchant street.  
 Mc Donald, gold, silver and copper.  
 Mount Hope, No. 2, gold and silver.  
 Mammoth Consolidated, Excelsior district, M G Elmore, 828 Montgomery street.  
 Mountaineer, copper.  
 Mount Stanislaus, gold and silver,  
 Mohawk, gold and silver.  
 Monitor, gold and silver, El Dorado Canon.  
 McMahon, gold and silver, Devil's Gate district, A Noel, 607 Washington street.  
 McClellan, gold, Virginia district, Jabish Clement, 48 Metropolitan block.  
 Missouri, gold and silver, Reese River district, M L McDonald, 34 Metropolitan block.  
 Mina, gold and silver, Esmeralda district, John Crowley, 428 Montgomery street.  
 Mount Zion silver and copper, R H Blanding, corner California and Montgomery streets.  
 Minturn & Garland, gold and silver, Virginia district, T Brownjohn, 621 Clay street.  
 Mount Washington, gold and silver, Virginia district, Henry Toomey, 402 Montgomery St.  
 Midnight, gold and silver, Esmeralda district, William V. Garvey, 619 Montgomery street.  
 Metropolitan, gold and silver, Silver Mountain District, T J Owens, 1 Amory Hall.  
 Mammoth Ledge, copper, Del Norte county, George F. Sharpe, U. S. Court building.  
 Moselle Mining Company, Esmeralda district, W W Lawton, 400 Montgomery street.  
 Mississippi, Virginia district, G H Bigelow, over Parrott & Co.  
 Manzanilla, Sinaloa, Mexico, Thomas Brownjohn, 621 Clay street.  
 Musquito Quartz Mining Company, Edward Fennard, 433 Montgomery street.  
 Manchester G. & S. M. Company, Monitor dis. Amador, Hugo Dreschfeld, 24 Naglee's bd.  
 Marronena, silver, Lower California, Wm Faulkner, 411 Clay street.  
 Mohawk, g & s, Virginia District, H S Dalliba, 604 Montgomery street.  
 Mountain Glen, gold and silver, Big Creek d  
 Minnie Lota, gold and silver, Esmeralda  
 Mineral Mountain, g and s, Calaveras co.  
 Martinez, gold and silver, Reese River  
 Monitor, gold and silver, El Dorado Canon



Norman G. & S. Mining Co., Star Dis., Humboldt, John M Burnett, 536 Washington St.  
 Nacosari, gold silver and copper, Sonora, Mexico, T B Bigelow, Cor. Jackson & Front.  
 New York Quartz Mining Co., S Pinkham 222 Sacramento St.  
 New Esmeralda, gold and silver, T B Openheim, Aurora.  
 Noonday, gold and silver, J W Crosley, Government House.  
 Nevada, gold and silver, Reese River Mining District, 228 Front street  
 Ne Plus Ultra, consol' Weaver district, J H Harris, cor Clay & Sansome Sts.  
 Newsome, gold and silver, Silver City District, J. H. Parkitt, 40 Metropolitan Block.  
 Noonday, g. s. & c., Contra Costa, J W Crosley, 9 & 10 Government House.  
 Ninian, gold and silver, Blue Sulphur Springs, Virginia, R N Van Brunt, 706 Montg'y st.  
 Noah Webster M. Co., Humboldt, R N Van Brunt, 706 Montgomery street.  
 New York, gold and silver, Gold Hill, N. T., H C Kibbe, 542 Sac; street  
 North Potosi, silver, Virginia dis., E V Joice, cor. Battery and Washington streets.  
 Norman, silver, Flowery district, John F Bailey, 40 Montgomery Block.  
 Napa Quartz Mining Company, Esmeralda district, ———, Napa City.  
 Norton, gold and silver, Virginia district, R N Van Brunt, 706 Montgomery street.  
 Nevada Tunnel & Mining Co., Esmeralda district, ———, Aurora.  
 New El Dorado, gold and silver, Virginia district, ———, Sacramento.  
 New York, gold and silver, Slate Range district, A H Clarke, 522 Montgomery street.  
 Nevada Mining Co., Esmeralda district, P B Cornwall, 608 Merchant streets.  
 Neversink, gold and silver, Esmeralda district, D Clark, Court block.  
 North Star, gold and silver, Humboldt district, J H Gager, Merchant St., Montgomery blk  
 Nightingill, gold and silver, Cinnabar district, A L Chamberlin, 413 Montgomery street.  
 Numa, gold and silver, Mono county, Wm. Fishel, cor. Battery and Sacramento streets.  
 North W Francis, gold and silver, Slate Range district.  
 North Star, gold and silver, Reese River district, J A Drinkhouse, 228 Front street.  
 New World, gold and silver, Wm H Watson, 607 Clay street.  
 New World gold and silver, N Webster, 608 Montgomery street.  
 N Y Point G and S M Co, Gold Hill district, N K Lamson, Virginia city.  
 Norman Company, Virginia district, J H Brewer, 40 Montgomery street.  
 National, gold and silver, Esmeralda district, J F Sterling, 33 Montgomery street.  
 Nevada Coal Co, Boiling Springs district, Humboldt, C Gardner, 3 Barron's Building.  
 North, gold and silver, Star district, James Herrick, 606 Montgomery street.  
 New Era, copper, Salt Spring district, E Barry, 636 Sacramento street.  
 Noonday, gold and silver, Reese River district, L D Ingoldsby, 80 Merchant street.  
 Niagara, gold and silver, American District, G J Turner, 606 Montgomery street.  
 Nashville, gold and silver, Oro Fino, Humboldt Co., N. T., E C Lovell, 436 Jackson street.  
 New Eden, gold and silver, Devil's Gate district, A S Gould, 528 Clay street.  
 Nevada, gold and silver, Nevada district, Cal. S Pinkham, Front street.  
 Noble, copper, Calaveras County, E A Breed, Lucas and Turner's Building.  
 Nevada, copper, Nevada Co, G V, John Armstrong, 610 Merchant street.  
 Napoleon, copper, Calaveras Co, R C Alden, 420 Montgomery street.  
 New Year Diggins, gold and silver, Aug. Kurnast, 410 Montgomery St.  
 Niagara, gold and silver, Colorado district, M G Elmore, 528 Montgomery street.  
 Nevada Gold Quartz Mining Co. Deer Creek, Nevada Co. G W Kinzer, 56 Mont. Block.  
 Noah Webster Mining Co. Humboldt Co.  
 North Star Consolidation, g and s, Coso dis  
 Ne Plus Ultra, gold and silver, Clayton dis  
 Nuestro Senora del Refugio, s, Sonora, Mex  
 Niagara Con. gold and s, El Dorado Canon  
 Natividad, gold and silver, Reese River  
 Ne Plus Ultra Con. Mining Co. Arizona  
 Norman, gold and silver, Raymond Dis. T J Owens, 1 Brmory Hall.

Occidental Gold & Silver Mining Co., Silver mount', Mono Co., E C Lovell, 436 Jackson St.  
 Ottawa, gold and silver, Devil's Gate District, Isaac Tabor, Armory Hall.  
 Olympic, g and s, Reese River, E C Palmer, Government House  
 Ophir of the Colorado, No 1. G & S Mining Co., Colorado, Arizona, R Clarke, Met. Block.  
 Ossipee, gold and silver, R O Sturtevant, 612 Montgomery St.  
 Occidental, copper, Soledad Dis. E Barry, 636 Sacramento.  
 Ophir Mountain, g and s, Slate Range Dist, J B Russell, 410 Montgomery street  
 Orleans Quicksilver; Lake county, H C Kibbe 542 Sac. street  
 O'Maha, copper, Campo Seco, H C Kibbe, 542 Sac. street  
 Ophir, silver, Virginia district, Thos J Lamb, Room 1 Express building.  
 Osceola, gold and silver, Silver City, C W Evans, San Antonio, Alameda.  
 Occidental Mining Co, Emma Frances district, J H Gager, Montgomery street.  
 Orio, Mining Co, Santa Cruz Co, Geo H Kohler, 526 Montgomery street.  
 Oriental, gold and silver, Virginia City, John L Leconey, Virginia City.  
 Oneida, gold and silver, Mono county, E Daniels, Express Building.  
 Oregon, gold and silver, Reese River district, 228 Front street.  
 O'Donohue, gold and silver, Esmeralda district, T Flitcroft, 617 Clay street.  
 Offield Ledge Mining Co, Sacramento Co.  
 Oriental, gold and silver, Monitor district, T J Owens, 1 Armory Hall.  
 Owens River, gold and silver, Ira Munson, 317 Montgomery street.  
 Omega Mining Co, Gold Hill district, L D Ingoldsby, 80 Merchant street.  
 Oriole, gold and silver, Esmeralda district, Thos Letson.  
 Occidental, copper, Soledad district, E Barry, 636 Sacramento street.  
 Oro Fino, gold and silver, Reese River district, M L McDonald, 34 Metropolitan block.  
 Ophir Mountain, Slate Range district, J B Russell, 410 Montgomery street.  
 Overland, silver, Reese River district, A S Gould, 528 Clay street.  
 Orleans Quicksilver Mining Co., Lake Co, H C Kibbe, 541 Sacramento street.  
 Omaha, copper, Campo Seco, H C Kibbe, 542 Sacramento street.  
 Olive City, copper, La Paz, Thos Brownjohn, 621 Clay street.  
 Owens' River, gold and silver, Inyo district, Tulare Co, E C McComb, 621 Clay street.  
 Ophir Silver Mining Co. Slate Range district, John B Russell, 410 Montgomery street.  
 Original Gould & Curry, g and s, Silver Mtn  
 Osceola Hill, silver, Summit district  
 Oasian Copper mining co, Calaveras co  
 Ophir and Auburn Con. g and s, Placer co  
 Old Saxon mining co, Virginia dis  
 Oriental and Occidental Consolidated, g & s

Princeville, gold and silver, Esmeralda, J P Cooledge, Aurora.  
 Pacific Quicksilver, Lake county, H C Kibbe, 542 Sac. street  
 Princess, g and s, Colorado Dist, New Mexico, R Clark, 422 Montgomery street  
 Pine Hill, copper, Bear River Dist, Nevada county, J H Culver, 43 L street, Sacramento  
 Polar Star, gold and silver, Jas M Swift 617 Clay St.  
 Palmetto, gold and silver, W F Hughes, 305 Montgomery street  
 Penole, gold, silver and copper, Geo. A Ball, 517 Clay street  
 Pennsylvania, W H Martin, 810 Montgomery street  
 Pacific Land Co., Oregon, Joseph C Ford, 607 Washington street.  
 Patten, gold and silver, Humboldt, J F Miller, 607 Washington street.

Poindexter G. & S. Mining Co., Colorado District, Wm Hollis, 410 Montgomery street  
 Potsham Consolidated M. Co., Humboldt, R N Van Brunt, 706 Montgomery street.  
 Potosi, gold and silver, Virginia district, J F Lightner, Metropolitan block.  
 Pride of the Antelope, gold and silver, Esmeralda district, ———, Aurora.  
 Porter, gold and silver, Lamb Ledge R C Page, 420 Montgomery street.  
 Philadelphia, gold and silver, Slate Range, district A H Clark, 522 Montgomery street.  
 Pena, silver, San Antonio, L C Wm. Faulkner, 411 Clay street.  
 Peytona, gold and silver, Virginia district, C Stevens, 6 Parrot's building.  
 Polar Star, gold and silver, Esmeralda district, M B Ashim, Sacramento.  
 Peerless, gold and silver, Buena Vista district, A L Chamberlin, 413 Montgomery St.  
 Pioneer, silver, Washoe district, Wm A M Van Bokolen, Virginia City.  
 Pacific, gold and silver, Mono Co., H R Reed, 321 Washington street.  
 Portland, silver, Aurora, Geo Bower, Montgomery street.  
 Pond, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street.  
 Pride of Esmeralda, gold and silver, Esmeralda district, J F Bailey, 605 Sacramento St.  
 Paul Thompson, gold and silver, Esmeralda district, George Bower, Montgomery street.  
 Pioneer Coso, Coso district, E B Holmes, 712 Montgomery street.  
 Pauline, gold and silver, Esmeralda district.  
 Pride of Wide West, Esmeralda district, John Crowley, 428 Montgomery street.  
 Prospero, gold and silver, Humboldt district, V B Post, Lucas & Turner's building.  
 Pride of Ophir, Esmeralda district, Thos Brownjohn, 621 Clay street.  
 Pepita, silver, Dev Is Gate district, Gomer Evans, 338 Montgomery street.  
 Pine Nut Consolidation, silver, Reese River district, A S Gould, 528 Clay street.  
 Pilot Hill Consolidation Mining Co. Greenwood district, D F Verdenal, 636 Clay street.  
 Plutana, gold and silver, Devil's Gate district, J L Pool, 540 Washington street.  
 Prince Imperial, gold and silver, Calaveras Co. J Woodthorpe, 326 Clay street.  
 Princess, gold and silver, Colorado district, Ne w Mexico, R Clark.  
 Pride of the West Mining Co. Silver City, L D Ingoldsby, 80 Merchant street.  
 Pacific Star Con. gold and silver, Star district, J L Pool, 540 Washington street.  
 Piney Creek, gold, silver and copper, Mariposa Co. Jos. Dardano, Lucas & Turner's Bdg.  
 Palmyra Consolidation, gold and silver, Palmyra district, C W Curtis, 606 Montgomery st.  
 Pensacola, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 Poor Man's Mining Co. Prince Royal district, W Sparrow, 543 Clay street.  
 Puritan, gold and silver, H B Congdon, 621 Washington street.  
 Pride of Washoe, gold and silver, Washoe district, Wm E Moody, 706 Montgomery street.  
 Providence, gold and silver, Nevada Co. J M Buffington, 12 Government House.  
 Pioneer Mill and Mining Co. Reese River district, L D Ingoldsby, 80 Merchant street.  
 Parker Tunnel, gold, Esmeralda district, A S Gould, 528 Clay street.  
 Princess Royal, gold and silver, T C McCallan, 617 Clay street.  
 Peninsular Mining Co. Lower California, D A Jennings, 606 Front street.  
 Pacific Quicksilver Mining Co. Lake Co. H C Kibbe, 543 Sacramento street.  
 Plymouth Quar z Mining Co. Kelsey district, L D Ingoldsby, 80 Merchant street.  
 Pacific Copper mining co, Del Norte co  
 Pennsylvania mining co, Bear River dis  
 Prima Donna, g and s, Amador co  
 Potsdam Con. mining co, St Mary's d, N T  
 Pioneer Mill and mining co, Nevada Ter  
 Panama Con. g and s, Smoky Valley dis  
 Pyroide Union, gold, Contra Costa co  
 Prima Donna, g and s, Devil's Gate  
 Perseverance, copper, El Dorado co

Quincy Mining Co. Plumas Co. ——— Quincy, Plumas Co.  
 Queen City, gold and silver, El Dorado Canon.  
 Queen of the West, gold and silver, E E Phillips, Gold Hill.  
 Quaker City Little Giant, gold, silver and copper, Clayton district, W L Kirby, 611 Clay st.  
 Quartz Mountain, gold and silver, El Dorado Co. F W Gross, 476 Jackson street.  
 Queen of the West, Reese River district, T Brownjohn, 621 Clay street.  
 Quartz Mountain, g and s, El Dorado co  
 Queen of Sheba, g and s, Washoe Valley

Romelia mining Co., Contra Costa Co., J W Crosley, 9 & 10 Government House.  
 Red Jacket, mining Co., Contra Costa county, J W Crosley, 9 & 10 Government House.  
 Red Rock, G & S, A C Tietman, 54 Clay St.  
 Royal Eagle and Cliff, g and s, J Krieg, 755 Clay street  
 Rosario, g and s, Sinaloa, Mexico  
 Rosario, gold and silver, Palmyra Dist, Wm Willis, 712 Montgomery street  
 Rose Ellen, copper, Garden Bar Dist. Placer county, J H Culver, 43 L street, Sacramento  
 Rock River, gold, Butte county Cal., H C Kibbe, 542 Sacramento street  
 Rose Spring, G. S. & C., Eldorado, G J Turner, 606 Montgomery Street.  
 Rogers, silver, Flowery district, John F Pope, 113 California street.  
 Real del Monte Con. gold and silver, Esmeralda district, S Pattee, 522 Montgomery street  
 Reese River, gold and silver, Reese River district, R N Van Brunt, 706 Montgomery st.  
 Red, White and Blue, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery.  
 Rochester, gold and silver, Slate Range district, A H Clark, 522 Montgomery street.  
 Ruth Windsor, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Rhodes Diggings Quartz Mining Co. Esmeralda district, G Touchard, 414 Montgomery st  
 Recorder, gold and silver, Storey Co. J S Davies, 18 Montgomery block.  
 Ruby, gold and silver, Star district, W H Martin, 617 Clay street.  
 Realito, gold and silver, Sonora, Mexico, W C Budd, 412 Sansome street.  
 Rip Van Winkle, gold and silver, Esmeralda district, M G Elmore, 528 Montgomery street  
 Rosebud, gold and silver, Esmeralda district, J M Burnett, 605 Montgomery street.  
 Rochester, gold and silver, Esmeralda district, Isaac Tabor, 7 Armory Hall.  
 Roanoak, gold and silver, Esmeralda district, Jas Herrick, 605 Montgomery street.  
 Railroad, silver, Reese River district, A S Gould, 528 Clay street.  
 Rough and Ready, gold and copper, Nevada county, C W M Smith, 57 Gov. Building

Rife, gold and silver.  
 Relief, gold, silver and copper.  
 Rose Spring Water and Mining Co. Coso district, W W Lawton, 400 Montgomery street.  
 Ragsdale, gold and silver.  
 Ragas, gold and silver.  
 Russell, gold and silver.  
 Red Rock, gold and silver.  
 Rich Hall, gold and silver.  
 Ruth Windsor Tunnel Co. Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Rhodes North Ex. Mining Co. Folsom district, L Maubec, 716 Montgomery street.  
 Rambler Mining Co. Slate Range district, Wm V Garvey, 619 Merchant street,  
 Rose Quartz Mining Co. Eagle and Washoe districts, Jas Herrick, 606 Montgomery street.  
 Rising Sun, copper, Clayton district, W S Kirby, 611 Clay street.  
 Rock River, gold, H C Kibbe, 542 Sacramento street.  
 Red Butte Mining Co. Esmeralda district, W W Lawton, 400 Montgomery street.



- Royal Eagle and Cliff, gold and silver, J Krieg, 755 Clay street.  
 Savanna, gold, Arizona Territory, Jules P Cavillier, 619 Washington Street.  
 Jose Spring, Hump of the Dip, Pilot Knob district, G J Turner, 606 Montgomery street.  
 Alto Con, g and s, Silver mountain dis  
 Lockwell, g and s, Raven-wood dis  
 Rosario and Carmena mg co, Sinaloa, Kex  
 Richard Hall, g and s, Lander co  
 Rothschild, g and s, Sierra dis  
 Rising Sun, g and s, Reese River  
 Riverside Quartz mining co, Tuolumne co
- an Gabriel, gold, silver and copper, Carmen Island, L. C., J W Gould, 406 Montgomery St.  
 Sarah Frances, g and s, Wester Dis, F V Scudder, 6 Barron's Building.  
 an Francisco S. M. Co., Lower California, H C Kibbe, 542 Sacramento street  
 Santa Cruz, silver, Lower California, Mexico, A Marcus, 519 Montgomery street  
 Southern Rights, g and s, Reese River Mining Dist, 228 Front street  
 Schiler g and s, Gold Hill, A N el, 607 Washington street  
 Salvador, gold and silver, C H Watson, 528 Montgomery street  
 Sacramento, g and s, S W Moore, 408 California street  
 Selbeck, copper, E F Bent, Selbeck Gallery's  
 Selbright, gold and silver, Humboldt, N T, J H Gager, Merchant St, Montg. Block  
 Silver Moon, gold and silver, E Jaudin, 523 Front street  
 Slate Range, Water Co, A H Clark, 522 Montgomery street  
 St. Charles and St Joseph, Humboldt, Chas. Lumbord, 528 Montgomery street  
 Stoytome, G & S, Esmeralda, R Robinson, 636 Sacramento St.  
 Seneca, G & S, Esmeralda, R Robinson, 626 Sacramento St.  
 an Rafael, gold and silver, Marian county, F H Rogers, 607 Washington street.  
 St. Charles, gold and silver, Reese River, F H Rogers, 607 Washington street.  
 Santa Clara Tunnel and Mining Co., Esmeralda Dis., J H Smyth, 49 Metropolitan Block.  
 Hammer, gold and silver, Kern River, Cove district, J F Miller, 327 Montgomery street.  
 Harto, copper, Carmen Island, Isaac Tabor, 7 Armory Hall.  
 St. Charles, gold and silver, Reese River, Lander County, F H Rogers, 607 Washington str.  
 St. Clair, gold and silver, R T Polk, 56 Metropolitan Block.  
 Southern Belle, gold and silver, Reese River, R T Polk, 56 Metropolitan Block.  
 St. John, Coal co, Cal. and Nevada, H S Dalliba, 604 Montgomery st.  
 St. Edmund, gold and silver, Silver City District, J H Purkitt, 40 Metropolitan Block.  
 Hay, gold and silver, Silver City District, J H Purkitt, 40 Metropolitan Block.  
 Hitting Sun, g. s. & c., Contra Costa co., J W Crosley, 9 & 10 Government House.  
 Sophie, gold and silver, Tuolumne county, J C Ford, 607 Washington street.  
 an Jose de Vantas Mining Co. Durango, Mexico.  
 Summit Pass Mining Co. Tuolumne Co. T B Ludlum, 528 Clay St.  
 an Francisco, gold and silver, Slate Range district, G J Turner, 606 Montgomery street.  
 Neba, gold and silver, Star district, R C Harrison, 6 Naglee's Building.  
 an Francisco, gold and silver, Colorado dis., H C Kibbe, 542 Sac. street, cor. Mont'y  
 South Sonora Mining Co. Esmeralda district, J M Burnett, 605 Merchant street.  
 an Carlos Exploring and Mining Co. Tulare Co. W W Lawton, 400 Montgomery street.  
 Shiller, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Minas, gold and silver, Monterey, Geo E Whitney, 9 Montgomery Block.  
 Soledad, silver, Soledad district, Geo H Russell, 636 Sacramento street.  
 South Potosi, gold and silver, Buena Vi-ta district, J S Luty, 305 Montgomery street.  
 South Exploring and Mining Co. Humboldt district, L Franconi, Lucas & Turner's Bdg.  
 St. Charles, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Stone-wall Consolidation, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street  
 am, gold and silver.  
 anbeam, 1st SW Extension, Esmeralda district, T Brownjohn, 621 Clay street.  
 Santa Isabel, silver.  
 Skiyon, gold and silver, Star Di., C E Judd, 523 Mont'y St.  
 Well Exploring and Mining Co. J H Titcomb, 610 Montgomery St.  
 Salvador, gold and silver.  
 an Francisco, gold and silver, San Francisco district, M G Elmore, 528 Montgomery st.  
 Poky Valley, silver, Lander Co. A S Gould, 528 Clay street.  
 Spring Valley, copper.  
 Over State Mining Co. Virginia district, J S Davies 18 Montgomery Block  
 Lazar, silver, La Paz, Arizona, C I Eaton, over Keith's drug store.  
 Feet Vengeance, gold and silver, A Vavillier, 610 Front street.  
 Sedad Pass, copper, J H Rutenburg, 442 Washington St.  
 an Francisco, silver, Potosi Ledge, N Shiverick, cor Montgomery and Clay.  
 Over Mount, copper, Esmeralda district, S Pattee, 522 Montgomery street.  
 Kondale, gold and silver, Esmeralda Dis., E. Clark, metropolitao block.  
 South Hawley Mining Co. Virginia district, J F Pope, 113 California street.  
 Bella Mining Co. Virginia district, J S Davies, 18 Montgomery Block.  
 Baron Mining Co. Virginia district, J S Davies, 18 Montgomery street.  
 Lambro, copper, Tuolumne, L Franconi, Lucas & Turner's Building.  
 Lignaw Quartz Mining Co.  
 an Rafael, gold and silver, Marin county, F H Rogers, 607 Washington street.  
 Evenson-Kehoe Mining Co. Gold Hill, Wm Willis, 712 Montgomery street.  
 anislaus Union, gold and silver, H O Howard, 523 Montgomery street.  
 ottie, gold and silver.  
 erra Consolidation, gold and silver, M F Hitchcock, 305 Montgomery street.  
 an Moore, gold, silver and copper, Clayton district, A B Graves, 412 Clay St.  
 Santa Rosa Mining Co. W D Robertson, 619 Mont'y St.  
 eptoe, gold and silver.  
 rprise, gold and silver.  
 nora, gold and silver, Virginia district, L D Ingoldsby, 80 Merchant street.  
 Santa Rosa, gold and silver, E Polhemus, 413 California street.  
 andinavian, g and s, Silver mountain  
 Neba Cent, g and s, Humboldt co  
 Santa Rita mining co, Sinaloa, Mexico  
 ar of the West, g and s, Amador co  
 Savage No. 2, g and s, Virginia dis  
 Santa Clara Tun and M co, Esmeralda  
 ver Prize, g and s, Silver mountain dis  
 ver Creek, g and s, Silver mountain dis  
 Valley Forge g and s, Lander co  
 an Francisco Bay co, San Francisco  
 an Antonio Chiquito, silver, Chihuahua  
 an Gabriel, gold and silver, La Paz dis  
 uthern Light, g and s, Reese Riger  
 artan, g and s, Humb ld co  
 Andrews, g and s, Lyon co  
 an Francisco mining co, Carmen Island  
 Seneca mining co, Virginia dis
- Scorpion, silver, Virginia district, W H Martin, 617 Clay street.  
 Sierra Nevada, silver, Virginia district, J H Brewer, 40 Montgomery block.  
 Silver City, gold and silver, Silver City, O Risdon, cor Battery and Bush.  
 Succor, gold and silver, Gold Hill district, R H Waller, 1 and 2 Montgomery block.  
 Shelton, silver, Argentine district, J S Davies, 18 Montgomery Block.  
 Sierra, silver, Genoa district, J F Pope, 113 California street.  
 Sierra Lumber and Mining Co. Genoa district.  
 St. Louis, gold and silver, Gold Hill district, J H Brewer, 40 Montgomery Block.  
 Silver Mound, silver.  
 Silver City Quartz Mill Co. Silver City, E Bauer, 414 Washington street.  
 Scoria, Virginia district.  
 Swansea Mill and Mining Co. Silver City.  
 Sapphire Quartz Mill and Mining Co.  
 Santiago, gold and silver, Silver City, E A Breed; Lucas & Turner's Building.  
 Santa Rosa, gold and silver, Virginia district, Nelson Hudson, Front street.  
 Sacramento, gold and silver, Virginia district, S W Moore, 408 California street.  
 Sam Wright, Esmeralda district, E Worth, 547 Washington street.  
 Sierra Butte Quartz Mining Co. Sierra Co.  
 Sigel, gold and silver, Humboldt district, J H Gager, Merchant st., Montgomery Block.  
 Savage Mining Co. Virginia district, G B McAneny, 712 Montgomery street.  
 St. George, gold and silver, Virginia district, H Bigelow, cor Mont. & Sac. streets.  
 Slate Range, gold and silver, Slate Range district, A H Clark, 522 Montgomery street.  
 South Utah, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street.  
 Sol Lewis, gold and silver, Esmeralda district, John Crowley, 422 Montgomery street.  
 San Francisco, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 San Marcial, silver, Sonora, Mexico, R N Van Brunt, 706 Montgomery street.  
 San Bernard, silver, Star district.  
 San Jose, silver, Lower Mexico.  
 Sacramento East, gold and silver, Slate Range district, W H Clark, 224 Montgomery st.  
 Sonora, gold and silver, Esmeralda district, H D Bequette, Aurora.  
 Sam Patch, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 Silver Mound, gold and silver, Grass Val., Nevada Co. John Armstrong, 610 Merchant St.  
 Strawberry, gold and silver, Esmeralda dis rict, H D Bequette, Aurora.  
 Suro, gold and silver, Virgin'a district, N W Winton, Virginia City.  
 Shoshone, silver, Lander Co. M J Newmark, 522 Montgomery street.  
 Sagar Pine, gold and silver, Tuolumne Co. S D Jones, Custom House.  
 Seneca, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Silver Age, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Etogome, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 St. Clair, gold and silver, Esmeralda district, E Worth, 547 Washington street.  
 Schmeltzer, silver, American district, M G Elmore, 528 Montgomery street.  
 St. George, gold and silver, Humboldt district, A L Chamberlin, 413 Montgomery street.  
 Silver Age, gold and silver, Virginia district, — Mygett, Virginia City.  
 Saginaw Quartz Mining Co. Tulare Co. F W Gross, 436 Jackson street.  
 Sailor, gold and silver, Blue Mountain district, H Dreschfeld, 24 Naglee's Building.  
 Syren, gold and silver, Calaveras Co. Leon Maubec, 716 Montgomery street.  
 Suburban, gold and silver, Mission Dolores, M Calkin, 326 Clay street.  
 Seneca, gold and silver, Santa Cruz Co. M Calkin, 326 Clay street.  
 Saratoga, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Silver Light, gold and silver, Gold Hill district, F Vassault, 4 Barron's Building.  
 South Esmeralda, gold and silver, Esmeralda district, Wm V Garvey, 619 Merchant street.  
 San Francisco, silver, Reese River district, A S Gould, 528 Clay street.  
 Silver Wedge, gold and silver, N Shiverick, cor Montgomery and Clay.  
 Silver Star, gold and silver, Virginia district, W E Moody, 706 Montgomery street.  
 San Antonio, silver, P Van Pelt, 310 Sansome street.  
 Soledad, copper, Soledad district, E Barry, 636 Sacramento street.  
 Silver Age, copper, Humboldt district, E Flanagan, 8 Naglee's Building.  
 San Lorenzo, gold and silver, Santa Cruz Co. M Calkin, 326 Clay street.  
 Star Light, gold and silver, Humboldt district, J H Gager, Merchant street.  
 Silver Butte Consolidated Silver Mining Co. Silver Butte dis. M G Elmore, 528 Montgomery.  
 San Mateo Copper and Cannel Coal Mining Co., San Mateo and Santa Clara.  
 Soledad Hill, copper, Los Angeles county, Jule P Cavillier, 619 Washington street.  
 Sierra Valley, g and s, Plumes co  
 San Patricio mining co, Carmen Island  
 San Fernando Qtz Mill & M co. Slate Range  
 Sutter Creek, g and s, Amador co  
 St Charles, g and s, Reese River  
 Salamander, g and s, Coso dis  
 Star of Hope g and s, Silver mountain  
 Spring Lode, g and s, Esmeralda  
 South Chihuahua, g and s, Esmeralda  
 South Sacramento, gold and silv, Cedar Hill  
 St Mary's, gold and silver  
 Star, gold and silver, Lyon county  
 San Francisco, g and s, Calaveras co  
 Santa Cruz Petroleum Oil M co  
 Spencer, g and s, Humboldt co  
 San Francisco Tunnel & Mining Company.  
 Sierra Nevada Gold Quartz Mining co.  
 Sacramento, gold and silver, Humboldt co.  
 Star of Empire, gold and silver, Marip'a co.
- Thompsons, gold and silver, Simpson's Park district, R T Polk, 56 Metropolitan Block.  
 Toronto, gold and silver, Argentine District, J H Purkitt, 40 Metropolitan Block.  
 Tri Union, silver, Virginia district, N. T., N Shiverick, 605 Clay street.  
 Tecoripa Mining Company, T B Bigelow, corner Jackson and Front  
 Tranquillon, g, s and c, J F Lohse, 430 Jackson street  
 Tellurium, gold and silver, W H Martin, 617 Clay street  
 Tajo, g and s, A G Stiles, 212 California street  
 Tennessee, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 Tucker, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street  
 Triunfo, gold and silver, San Antonio, L C, H S Brooks, 536 Clay street  
 Tigre of Colorado, gold and silver, Durango, Mexico, E W Newman, 737 Union street  
 Techattacup, gold and silver, Colorado district, E B Holmes, 712 Montgomery street  
 Third South Utah, gold and silver, Esmeralda district, Moses Frank, 609 Clay street  
 Tri-Union, gold and silver, Flowery district, N Shiverick, cor Montgomery and Clay  
 Tucker Tunnel Co. Esmeralda district, P B Cornwall, 608 Merchant street  
 Transmontane, Star district, W E Moody, 706 Montgomery street  
 Toquima, silver, Reese River district, A S Gould, 528 Clay street  
 Tulare Mining Co. Ingo Dist. Rodney Clark, 422 Montgomery street  
 Telegraph, gold and silver, Excelsior district, Wm V Garvey, 619 Merchant street  
 Tampais, Marin Co. S B Rooney, Government House



Triton, gold and silver, Virginia district, W E Moody, 706 Montgomery street  
 Tesora, gold and silver, Lower California, H E Kibbe, cor Sansome and California  
 Table Mountain, copper, Calaveras Co. M G Elmore, 528 Montgomery street  
 Texas, gold and silver, Cedar Hill district, J G Libby, Virginia City  
 Tescalama Mining Co. Lower California, J H Blood, 7 Montgomery Block  
 Telegraph, gold and silver, Silver mountain, T J Owens, 1 Armory Hall  
 True Delta, copper, Del Norte Co. John F Pope, 113 California street.  
 Tilly Tunnel and Mining Company.  
 Thunderer Ledge, gold and silver.  
 Tam O'Shanter, gold and silver, Esmeralda.  
 Thompson, gold and silver, Silver mountain.  
 Teutonia, gold and silver, Gold Hill.  
 Tip Top, gold and silver, Silver Mount. Dist.  
 Tonawanda, gold and silver, Colorado Dist.  
 Telegraph, gold and silver, Excelsior District.  
 Tecolota, silver, Durango, Mexico.  
 Tennessee, gold and silver, Echo District.  
 Twilight Tunnel Mining Co., Gold Hill.  
 Tallulah Mining Company, Humboldt co.

Utah, gold and silver, Flowery district, J H Gilchrist, Virginia City  
 Utah Mining Co. Esmeralda district, ——— Aurora  
 Union Consolidated, gold and silver, Russ district, C S Higgins, 410 Montgomery street  
 Union Tunnel Co. Esmeralda district, A J Simmons, Aurora  
 United States, gold and silver, Virginia district, S B Rooney, 8 Government House  
 Union, silver, Nevada Territory  
 Utica, gold and silver, Calaveras Co.  
 Uncle Sam, gold and silver, Silver Mountain, T J Owens, 1 Armory Hall  
 Union No. 2, gold and silver, Reese River district, 228 Front street.  
 Union, gold and silver, Russ district, J B Russell, 410 Montgomery street  
 Utah Consolidated, gold and silver, Reese River district, T Brownjohn, 621 Clay street  
 United Ledges, silver, Humboldt district, E Flanagan, 8 Naglee's Building.  
 United Ledges, gold and silver, Silver Hill district, E Flanagan, 8 Naglee's Building.  
 United States Mining Company, Virginia, S B Rooney, 11 Government House.  
 United, g, s and c, J P Van Hagan, Government House  
 Umpire, gold and silver, Sierra Dist, Humboldt M M Barker, 406 Montgomery street  
 United Cosmopolitan, gold and silver, French Corral, A Marcus, 519 Montgomery street  
 Uncle Sam, Silver Mountain Dist, T J Owens, 1 Armory Hall

Victorina G & S Mining Co., Esmeralda Dis., Theodore Wetzel, ——— street.  
 Valley, gold and silver, Buena Vista dist., Humboldt, G Falkenstein, 426 Montgomery st.  
 Valparaiso, g, C F Mebins, cor, Clay and Front streets  
 Vetu Granda, Arizona, W H Mills, 606 Montgomery St.  
 Victorina, g and s, Humboldt Hill, Esmeralda Dist, Theodore Wetzel, 627 Clay street  
 Virginia Hill, gold and silver, Virginia district, H Butenoss, Virginia City.  
 Vibbard, gold and silver, Esmeralda district, Jas Neary, 320 Clay street.  
 Villarino Mining Co. Lower California, J D Creigh, cor Montgomery and California.  
 Virginia Rogers Mining Co. Nevada Territory, E B Holmes, 712 Montgomery street.  
 Vulcan, gold and silver, Coso district, J H Gager, Merchant st., Montgomery Block.  
 Vesuvian, gold and silver, J P Nourse, Lucas & Turner's Building.

Veatch, silver, Simpson's Park, E B Holmes, 712 Montgomery street.  
 Venus, gold and silver, Buena Vista district, J L Pool, 540 Washington street.  
 Victor Hugo, gold and silver, Humboldt district, E Flanagan, 8 Naglee's Building.  
 Victoria, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.

Wisconsin Gold Mining Co., Jabish Clement, Metropolitan Block.  
 Woolsey, gold and silver, Gold Hill, Edward C Lovell, 436 Jackson street.  
 Wide Awake, gold and silver, Cinnabar dist., Humboldt, G Falkenstein, 426 Montgom'y s  
 Webster G & S Mining Co., Esmeralda, Wm T Atwood, 224 Montgomery street.  
 Winona, g and s, M G Elmore, 528, Montgomery street  
 Webster, g and s, Humboldt Dist., N T, H C Kibbe, 542 Sac. street  
 Washoe, gold and silver, Gold Hill district, D A Jennings, cor Jackson and Front.  
 Washoe Manufacturing and Mining Co. ——— Marysville.  
 Wide West Mining Co. Esmeralda district, Coll Dean, 325 Montgomery street.  
 White & Murphy, gold and silver, Virginia district, J P Nourse, Lucas & Turner's Bdg.  
 White Cloud, gold and silver, Virginia district, L A Stanchfield, 605 Montgomery street.  
 Willow Springs, gold and silver, Coso district, J H Sayre, 407 Montgomery street.  
 Wyoming, gold and silver, Esmeralda district, P B Oppenheim, Aurora.  
 Wm. Penn, gold and silver, Devil's Gate district, Henry Toomey, cor California and Mont  
 Washington, gold and silver, Slate Range district, W H Clark, 224 Montgomery street.  
 Winnemucca 1st Extension, gold and silver Silver Hill district, J T McMahon, Silver City  
 Worden, gold and silver, Monitor district, C H Wakelee, 612 Merchant street.  
 Winoshick, gold and silver, Coso district, V B Post, Lucas & Turner's Building.  
 Washington, gold and silver, Great Eastern Ledge, L F Yates, Virginia City.  
 Wilson, copper, Garden Bar district, Geo Bowes, 610 Clay street.  
 Washington, gold and silver, El Dorado Canon, T G Murphy, Virginia City.  
 Wm. Penn, gold and silver, Monitor district, A L Chamberlin, 413 Montgomery street.  
 Wasson Consolidated, gold and silver, Reese River district, J Herrick, 606 Montgomery.  
 Washington, g, s and t, Boiling Springs district, C Gardner, 3 Barron's Building.  
 Wisconsin, gold, Virginia district, Jabish Clement, Metropolitan Block.  
 Wm. B. Astor, gold and silver, Gold Hill district, J T Steele, Virginia City.  
 Warren, gold and silver, Excelsior district, Wm V Garvey, 619 Merchant street,  
 Washington, copper, Tuolumne Co. H L Brooks, Government House.  
 White Cloud, gold and silver, Star district, T Wallace, 1 Armory Hall.  
 Wyandott and Chrysopolis, gold and silver, Garibaldi district, E Flanagan, 8 Naglee's bdg  
 Winters, g & s, Argentine District, C W Jones, 32 and 33 Montgomery Block.  
 White Horse, g & s, Humboldt county, H S Dalliba, 604 Montgomery street.  
 Washington, gold and silver, Silver mountain, T S Owens, 1 Armory Hall.  
 West End, gold and silver, Silver mountain, S J Owns, 1 Armory Hall.

Young Wnnemucca, gold and silver, Esmeralda district, ——— Aurora.  
 Yellow Jacket, silver, Gold Hill district, E Caldwell, Gold Hill.  
 Yreka, gold and silver, Esmeralda district, C W Curtis, 606 Montgomery street.  
 Yarrowborough, silver, El Paso district, E Barry, 636 Sacramento street.  
 York River, gold and silver, John Gorman, 423 Battery street.  
 Young America Ocher, gold and silver, Amador Co. G J Turner, 606 Montgomery street.  
 York River, Reese River, John Gorman, 423 Battery street

Zephyr, gold and silver, Lyon Co. N. T.  
 Zouave, gold and silver, C B Hart, 15 Metropolitan Block.

# GEO. W. CHAPIN & CO. EMPLOYMENT OFFICE

— AND —

## REAL ESTATE AGENCY,

Furnish Employment for, and supply all kinds of Male and Female Help for MINES, SHOPS  
 RANCHES, HOTELS, FAMILIES, Etc., Etc. Also with the above give attention to

## BUYING AND SELLING MINING STOCKS,

Of every description, from

Washoe,  
Mexico,

Humboldt,  
Colorado,

Esmeralda,  
Slate Range,

Reese River,  
Owens River.

Office, Lower Side Plaza, Near Clay Street,  
SAN FRANCISCO.



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, AUGUST 24, 1863. NO. 43.

## REMOVAL.

The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing in re room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.

## OUR PROPOSED ENLARGEMENT.

The rapid increase of business both in the enlargement of our circulation, and in additions to our advertising patrons, such as we hope will soon enable us to announce a permanent enlargement of the paper. For the present we propose to issue an extra sheet every other week. We shall continue this arrangement until our business, which we must will continue to improve, will warrant a permanent enlargement, when the two issues will be thrown into one sheet and the paper established as a sixteen page issue.

## OUR MINING REGISTER

The supplementary issue of the present week, will consist mainly of a revised edition of our Mining Register which will be delivered free to all subscribers. Extra copies will be furnished to subscribers at the regular subscription price—Non-subscribers will be taxed twenty-five cents. will be issued to-morrow—Tuesday.

**COPPERPOLIS.**—We continue, in our present issue, the publication of notes taken during a late trip to Copperopolis. This region is being rapidly developed by the energy of its miners, aided largely by San Francisco capital. We spent several days in Copperopolis, but not half time enough to become thoroughly acquainted with its value and extent as a mining region. We shall endeavor to place before our readers such facts as we were able to collect, promising ourselves another visit at an early day, for more extended observation. We also hope at that time, to extend our trip into Amador, and still other portions of Calaveras county. In our next issue we shall speak at length of the Keystone, Union and Calaveras Companies Mines, and also of the Napoleon. We enjoyed our trip thither, much, and would take this opportunity to tender thanks for favors and courtesies received—especially to the Messrs. Powning, to Mr. J. W. Can, the gentlemanly clerk of the Copperopolis Hotel, and Mr. W. T. S. Ryer.

**RAILROAD IN NEVADA TERRITORY.**—The Virginia City and Truckee Railroad Company has been fully organized and a survey of the road completed, and grading is to commence immediately. The road runs from Virginia to Washoe City, a distance of thirty miles. A branch of four miles debouches and touches Carson City. The estimated cost of equipping and construction, is \$2,583,069 56.

The Pennsylvania Coal Mines Considered in Connection with the Recent Northern Invasion of Gen. Lee.

There is little doubt but that the destruction of the Pennsylvania Coal Mines was a portion of the rebel programme as marked out by them on the recent invasion of Lee. Had the confederate forces succeeded in occupying Harrisburg, the railroad communications between that point and the mines, about 50 miles distant, would have been destroyed, also all the pumping, hoisting and other machinery necessary for working them. It is not at all improbable that he would also have set the mines on fire, as he might easily have done, thus literally kindling a flame in the heart of Pennsylvania, which could never have been quenched except by turning rivers of water upon the conflagration!

The damage not only to the great industrial, but also to the commercial and military interests of the country which would have resulted from such proceedings can scarcely be estimated. All other raids which have been consummated by either or both belligerents, would, in their aggregate even, have fallen short of the tremendous blow which the destruction of the Pennsylvania Coal Mines, would have inflicted on the North. Northern industry would have been completely paralyzed by this single blow.

Anthracite coal is found in large quantities in no other part of the world but Pennsylvania. Enormous quantities of this description of coal are used for making steam in the countless workshops and manufactories of the North, and on their river and ocean steamers; while the Federal navy, as at present organized, would be almost powerless without it. The bituminous coals which are found in other localities, are far inferior to the anthracites for making steam, while the cost of transportation of such coals to the Atlantic coast would be enormous. The Richmond *Whig* of July 2nd was quite jubilant over the prospect which then existed that this terrible blow would fall upon us. It was happily averted by the terrible battles of July 1st, 2nd and 3d, and the government has evidently become aware of the great strategic importance of Harrisburg, and energetic measures are in progress for securing its safety against any future contingency.

**IMPROVED WATER PIPES.**—Wrought-iron water-pipes, lined and coated with hydraulic cement mortar, which are great improvements on other substitutes for cast-iron pipes, are now, at the East, rapidly superseding the former exclusive use of iron, under conditions of expense, oxidation, tuberculation, and leakage, which involve serious objections in water-works practice. These pipes have spigot-joints, can be back-filled as soon as laid, and tapped in the same manner as cast-iron pipes. Cement lined and coated water-pipes are now in use in a large number of our northern cities and villages, and have proved very satisfactory in operation.

**STATE AGRICULTURAL SOCIETY.**—The Tenth Annual Fair of the State Agricultural Society will commence on the 25th of September. Ten thousand dollars have been appropriated for premiums.

MR. EDITOR:—You will bear me witness that it was only at the last moment before your going to press a fortnight ago that I penned the few lines which appeared in your number of that date. They were intended to prevent any of your readers from purchasing sulphate of ammonia or chlorate of potash instead of sulphide of ammonium and chromate of potash, which those of them who relied only on "P's" communication would have been likely to do. With the errors that he says "*crept in by inadvertence*," left uncorrected and therefore by implication confirmed, "*miners*," not "*tyros in chemistry*," might otherwise have wasted their money and their time. "P's" rejoinder in your paper of last week gives much more importance to the subject. I found the letter in "*THE MINERS' LABORATORY*." "P" now classes it with the works of "*author's on practical chemistry*." Does he really wish to imply that he considers his "*list of reagents for silver complete*?" It contains but six. Rosé enumerates 19. I think, therefore, that I had a right to assume that the six were selected for their aptitude for occasional use, away from the resources of a fixed laboratory. I spoke of two of them as not commonly used. What is the fact? Alas, they do not furnish distinctive tests, when employed with solutions which may contain other metals than silver. The chromate of potash is classed by the above well known authority among the least used reagents. Can "P." buy one pound of the pure salt in San Francisco, in a day? The sulphide of ammonium is one of the most perishable articles we use. The air contained in a half filled bottle will destroy its purity. Fownes, Lamborn and Muspratt omit one or both. I have referred to books in my reply to the enquiries of "P," but I will venture to say that "P" in his practice, when traveling or prospecting, would never encumber himself with so superfluous an article. Why does "P" sneer at me in reference to chlorine? I wrote chloride. Need I tell him that I meant chloride of potassium, or chloride of calcium, which occur according to the mode employed in the manufacture of the chlorate of potash.

"P" might have been "absent," I thought, but he has returned to his task, and he is still of opinion, he says, that "*a solution of hydrochloric acid*" added to the "*contents of a bottle*," will "*precipitate (silver,) antimony and bismuth*." His first letter stated the color of the precipitate, viz: "*white*." I cannot doubt therefore that he has seen it. Allow me to congratulate him on his discovery; but why did he not announce it as such? He added that "*a quarter of an ounce of hydrochloric acid*" (I suppose the ordinary solution in water) would dissolve the antimony and bismuth, in a few moments. Your readers are therefore in this dilemma, either hydrochloric acid will both dissolve and precipitate these substances, or "P" has omitted to state the important ingredient in his "*solution of hydrochloric acid*," which precipitates antimony and bismuth and makes them rapidly dissolve again. "P" opened with supposing that "*the solution*" of pure silver was made in nitric acid. He directs no change to be made in this solvent. It will be a farther addition to science, if he will state explicitly how he can dissolve antimony in that acid. It will enlighten many

A POOR CHEMIST.



## COPPEROPOLIS AND ITS MINES.

In our last issue we gave some account of the early discoveries of copper in Copperopolis and its vicinity. A short time after regular work was commenced upon the mine, (early in the Fall of 1860,) Mr. Reed, one of the discoverers, being satisfied that the same would be permanent, put up a cloth house under the big oak tree still standing in front of the Copperopolis Hotel. This was the first house of any kind, built in Copperopolis. It was used as a boarding house for the hands employed upon the Keystone mine. The next house built was a small wooden building, still standing on its original location, a few feet distant from the first, and now used as the Justice Court Room. This was also built by Mr. Reed, and used as a boarding house for the hands employed upon the Union mine. Other structures, of wood and cloth, soon began to grow up around these pioneer buildings.

Early the following Spring, (1861,) Mr. J. M. Bean, fully satisfied from the developments already made that a town of considerable size must speedily grow up in that locality, commenced the erection of what is now known as the Copperopolis Hotel, one of the largest structures in that region of country. The commencement of this edifice led to quite an excitement, and a general staking out of lots, was immediately commenced. From that time to the present, Copperopolis has been rapidly increasing in growth and importance, until it now numbers a population of fully 1200 souls, with three hotels and several restaurants, two livery stables, two barber shops, six or eight well filled stores besides numerous smaller establishments, where "creature comforts," etc., are dealt out. A school house has been erected and a lot of ground set aside for a cemetery. Religious worship is held in a public hall.

Copperopolis presents at the present time, all the peculiar characteristics of one of the early mining camps of 1850, with the exception that its houses are constructed of lumber rather than canvas, as in those days. We know of no mountain town which bids fair to enjoy a more prosperous or permanent future than this young city of copper. It possesses mines of undeveloped extent, and of the most undoubted richness and permanency. Its future increase must reasonably keep pace with the development of its mines, which, thus far present indications excelled nowhere else in California.

## THE MINES OF COPPEROPOLIS AND VICINITY.

The traveler in approaching the foot hills from Stockton, on the Copperopolis road, if at all observant, will notice soon after leaving the plain a most marked change in the character of the country, which is not observable at any point north, along this range of hills, for at least a distance of one hundred miles. The change here alluded to is one, chiefly of a plutonic character, although the sedimentary rocks have at intervals been disturbed by protruding masses of the older crystalline formations, the latter also much changed by heat.—This belt of country is from four to five miles wide, from east to west. Its linear extent, north and south, we had no time or opportunity to observe, but from reports of persons familiar with the country, we infer it to be three or four times its width, at least. We apprehend that but few continuous veins of minerals will found be in this belt. The veins, wherever found, will doubtless be rich, in chimneys; or if continuous will be subject to numerous faults, or dislocations, which will entail much expense, in working, to keep the course of the vein.

After leaving this belt, in traveling eastward, the observer will notice quite as marked a change as on entering it. Its eastern limit is clearly marked by a well defined belt of slate, "tilted" as the commonly received opinion is, into an almost perpendicular position, with its sharp, rough edges sticking out of the ground from a mere perceptible outcrop to several feet in height. We have very little faith in this "tilting" process, in most instances, and in this, in particular; but of that at some future time. How far eastward this belt extends, we know not, for we explored no further in that direction than the town of Copperopolis. Along the linear extent of this slate belt, conforming in dip and direction with it, is what is evidently the mother vein of the district, and upon which are located, commencing at the northern extremity, the Consolidated, the Keystone, the Union, the Empire, and the Calaveras, which are adjoining claims, and through each of which there are unmistakable evidences of a continuous vein.

The character of the enclosing rock, and the surrounding

country generally is such as would lead the miner to look there for a continuous vein, without faults, and of a generally superior character. There are no indications of any local disturbances which might be supposed to produce "faults" or any special or extensive inequalities in the yield of the veins.

This vein may be looked upon as the "Comstock" of the copper region. There are numerous other veins, outside of this, some of which have already been found valuable, and others, yet undeveloped, show most flattering indications. Among these latter we might mention prominently the Eureka and Elizabeth, Consolidated, situated on the Eastern slope of Bear mountain. This vein, located about three miles to the east of Copperopolis, shows most unmistakable indications of richness. The Company have sunk a shaft of fifty feet, from which they are now taking out ore. This vein was originally taken up for silver. It assayed from \$4 @ \$7 per ton in gold and \$5 @ \$20 in silver. Nuggets of native silver were taken from ravines crossing this vein some five or six years ago. The ore is a sulphuret of copper, with the usual show of carbonates on the surface. The Company, which is composed mainly of San Francisco men, intend pushing on the work of development with the utmost vigor. The mine is under the superintendency of Mr. Solomon Johnson. Among the extensions of this lead we notice particularly the Crockett. This Company has taken out some 20 tons of ore.—fine yellow sulphurets.

The Table Mountain Company, is generally supposed to be a continuation of this lead, although many think it upon the Union and Keystone lead. Its position would seem to indicate the correctness of the first conclusion, but its general characteristics resemble more those of the Keystone than the Eureka.

Swinging around to the southward and eastward, about four miles from Copperopolis, we came to the Webster and Scorpion Company's claims, continuations most likely of the Union. The former has already shipped some fifty tons of ores to the smelting works of Antioch. They have sunk a shaft 130 feet deep on a well defined lode, six feet wide all the way down. The ore near the bottom of the shaft averages about seven or eight per cent., but is now improving with the decent. The Scorpion Company's claim is an extension and has also a very fine lode, yielding a higher grade of ore at corresponding depths. Considerable prospecting has been done upon this claim, but no large amount of ore has yet been raised from the mine.

To the south of Copperopolis, some four miles distant is the Swansey and Massachusetts Company's claims. The former has a shaft on their lode 70 feet deep, developing ore similar to the Webster and Scorpion. At that depth the shaft leaves the lode and has gone down thirty feet further, from the bottom of which the workmen are now drifting to the lead, with the expectation of finding richer ore than at any point opened above. The Massachusetts is a new claim and an extension, presenting flattering prospects. The surface indications are better, if anything, than even the Swansey.

To the west of Copperopolis, and in a valley lying parallel with that in which the town is located, there are a number of mines opened, with flattering indications. At the time of our visit, no work was being done upon any except the the Harlem and the Powning. upon the former, a large amount of work had been done under the direction of Mr. Westby the discoverer and Superintendent. Mr. W. showed us one of the finest shafts which we have ever seen in any locality, which had been commenced, but abandoned for the time. It is contemplated to put this shaft down, at some future time, to strike the vein at a great depth. At present he is taking out rock from near the surface, from another shaft. The ore from this mine is of a very promising character, considering the depth which has been reached. It resembles the Napoleon ore more nearly than any other which we noticed in that locality. Passing on, up the valley, we stopped for a few moments at the Kentucky company's shaft, near which we found some very good ore. A short distance from this point is located the Powning claim, a new location presenting very rich croppings. At the time of our visit the workmen had found no very distinct vein, but had arrived at indications which gave promise of soon arriving at a good lead. There are quite a number of other leads in this locality from which we shall probably hear favorable accounts ere long.

Some two or three miles above this locality a new town has been laid out, under the somewhat high sounding title of Carmen City. At the present time it consists of some three or four houses, only, but from the appearance of numerous specimens of copper ore which were shown us as having been taken from the mines of that neighborhood, we should not be surprised to see quite a town there in another year. The miners of Carmen City will have to go to work and do something to develop their mines, however, before they will be able to attract much capital thither. Copper indications have become quite to common at the present time to attract much attention from moneyed men, until some reasonable amount of labor has been done towards their development. It is not every vein that produces a few specimens that will turn out a good mine. Mines must be proved to have certain specific indications before they can be called *mines* or possess a value in "feet." Miners of every class will do well to bear this fact in mind and act accordingly.

## PROGRESS OF THE PACIFIC RAILROAD.

Steadily and surely onward is progressing the work of the great trans-mountain railroad, which as the Western division of the continental road, is destined, ere long, to unite the Atlantic and Pacific coasts, with indissoluble bands of iron, cemented by a common interest and a united destiny. The first division of 50 miles from Sacramento is already under contract, and the second division of the same extent which reaches to within six miles of the summit, will also be under contract by the first of December next. The route decided on is *via* Auburn, Illinoistown, Dutch Flat and Hell's Pass.

Work has already been commenced and is going bravely on. Slowly but steadily and surely, the iron feet are tramping up the Western Slope, and ere another twelve months shall elapse the locomotive's whistle will echo along its lower hills and valleys. Three years can scarcely come and go ere the iron horse will mount its highest level, pause a time, upon its giddy height, then resume its onward course across the hills of Silverland, along the valleys of the Great Basin, ar bounding over the slight obstructions of the once dreaded Rocky Mountains, continue its career far over the distant Plains beyond, and down the magnificent valley of the Platte until it reaches the turbid waters of the Missouri, where, unless the energies of our people are greatly overrated, it will arrive in season to celebrate the return of our next nation decade.

Six miles of the first section of the Western terminus the road are now ready for the rails, and six miles more will be ready during the present month. Six thousand tons of iron have been purchased, the delivery of which will soon commence at the rate of 500 tons per month. A large portion of this amount is now on its way from the East. Six locomotives, six passenger cars, twenty-five freight cars and twelve baggage cars are now on their way hither, as also are the tables for the first fifty miles of the road.

YIELD OF LAKE SUPERIOR MINES.—The Houghton Mining Gazette, of July 4th, gives the following as the yield of three principal Copper Mines of Lake Superior for the month of May last:—

The Quincy is again entitled to the flag for the largest product of any mine in three Districts for the month of May. The following are the figures:—

Quincy.....	129 tons, 313 lbs
Cliff.....	126 " 615 "
Minnesota.....	88 " 1,737 "

The above mines have been fairly opened, and under energetic progress for about eighteen years. California will present three, certainly, and we think we could name five if six copper mines, which will make a better exhibit of yield inside of twelve months from this date.

PROSPECTING FOR SILVER.—We learn that a party of capitalists in this city have associated for the purpose of examining mining claims in the neighborhood of Colima, one of the richest silver districts in Mexico. A man of scientific attainments has been employed and sent forward to prospect the claims in view carefully and thoroughly. Intelligence of his arrival at Manzanillo has been received, and his return is looked for in the course of next month. Should he report favorably, a considerable amount of capital will be once embarked in the enterprise.



## A NEW IDEA AND A GOOD ONE.

The Esmeralda Times, in speaking of the progress of the work upon the Stanford Tunnel in Aurora, notices the following ingenious expedient for furnishing light for the workmen during the day time:—

The tunnel, the most of the day, is worked without using candles. Mr. L. L. Deming, the Financial Secretary of the Company and Acting Superintendent, has found a more economical light; he uses the sun to work by. The tunnel is so admirably situated, and the cut being so wide, that it enables him, by the use of a mirror, to reflect the full rays of the sun quite in to the end where the men are at work, and it is so light that a paper can be read as easily as on the outside.

The above tunnel is in about 150 feet, with a open cut at its entrance, quite large in extent and height. Miners in other localities, driving tunnels, will do well to profit by this hint. The light introduced as above, is not only free of cost, but must be infinitely better than that derived from candles.

THERE IS TALK of establishing a Stock Board at Carson City, N. T. The local paper predicts success, should one be established. Why not?

ELECTRIC LIGHT IN PARIS.—The lighting of this, it is stated, is to be intrusted to M. J. in Malderan, who has invented a new electric light, one jet of which is equal to 2,200 lbs of gas. The Place Saint Sulpice is destined to be the first where the essay is to be tried.

QUICK WORK.—A letter from West Point states, as a sample of the efficacy of the graduating class of cadets that they dismount a cannon, and separate the parts of the carriage, and re-erect them, and fire the gun in 26 seconds.

## HAYNE &amp; LAWTON,

IMPORTED DEALERS IN

CROCKERY,

GLASSWARE,

FRENCH CHINA,

Coal Oil Lamps, table Cutlery

CLOCKS,

Silver Plated and China Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCER]

SAN FRANCISCO

## WRIGHT'S PATENT

JOHN WRIGHT, of Sacramento, published himself in San Francisco, for the purpose of every description of PICKERS, of the best kind, at reduced prices. Pick Eyes of the best iron, in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine is stamped with my name. JOHN WRIGHT, 516 Market street, Opposite Battery, San Francisco.

## WANTED

GOLD QUARTZ SUITE FOR CUTTING JEWEL

By FRONTIER AGENCY,

18 ap

437 Pine street, San Francisco.

## San Francisco Machine

...AND...

## IRON WORKS!

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON most reasonable terms. Steam Engines, High and Low Pressure; Quartz Mills, Saw Mills, Mining Pumps, Hoisting machines for mining purposes, Water Presses, Agricultural implements etc., etc., and Castings of all descriptions made to order. Steam Engines exchanged and for sale by

J. H. KNOX, DUNSMORE &amp; CO.

REPAIRING promptly attended to.

FOR SALE.

One Upright Post Drill, Putnam's manufacture, All one thirty inch screw Chuck, San Francisco, July, 1883. Jc13

## WHEELER'S

## Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in crushing up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans have been in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. Jc16-tf ZENAS WHEELER.

## Miners' Foundry

—AND—

## MACHINE WORKS,

First St., between Howard &amp; Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* \* \* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL &amp; KING

San Francisco, February 23, 1883.

## 50 lbs. MARINE and

## Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Lead and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. Fouquet, Superintendent.  
WORKS, North Beach; Office, 509 Sacramento st., San Francisco.

## New Patent Agency.

WE HAVE CONNECTED WITH THE Publication of the MINING AND SCIENTIFIC PRESS.

## The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

## Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 27, Federal Building, corner of Battery and Washington streets, (directly opposite the Post Office,) San Francisco. EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Federal Building EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 27, Federal Building. Terms moderate. EWER & SMITH.

## PATENT RIGHTS.

Patent Rights Bought and Sold, At the office of the "Mining and Scientific Press" Agency EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patent through this Office can have their inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns free of charge. The free use of our columns to us, and then in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

## MINING &amp; SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1882. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietors having had great experience as Patent Agents, together with facilities at Washington that enable them to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its columns will from time to time contain original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects and Millwrights.

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers.—Four Dollars per annum

Six Months, \$2.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of twenty and over, the yearly subscription is only \$2.00. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,

Room 27, (formerly) U. S. Court Building, Corner of Washington and Battery streets, San Francisco.

## SOUTH PARK

## Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH &amp; CO,

Office in Shiel's Block, opposite Masonic Temple.

S. F. CLOUSER, Secretary.

## ALEXANDER STOTT, MINING SECRETARY,

512 Sansome Street, San Francisco.

Secretary of—

HUGH SHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. and 10

## PATRONIZE HOME MANUFACTURES!!!

## James Longshore,

## Trunk and Valise Manufacturer,

307 Sansome Street, under Tehama House. Trunks and Valises, Wholesale and Retail, Fine Sole Leather Trunks, Valises, and a fine assortment of LADIES' TRUNKS constantly on hand. Trunks covered and repaired. aug x

## W. W. HANSCOM, Steam and Mechanical Engineer,

Designs furnished, and Drawings made for Engines, Mills, Water Wheels, Mining Machinery, etc., etc.,

At Golden State Iron Works,

aug x First Street, San Francisco.

JOHN P. GALLAGHER.....JOSEPH H. WEED.

## GALLAGHER &amp; WEED,

## BRASS &amp; BELL FOUNDRY

AND

## LOCK FACTORY.

No. 125 First Street, opposite Minna, next door to Pacific Foundry, all kinds of

Brass and Composition Castings and Finishing, done with neatness and dispatch.

CHURCH AND STEAMBOAT BELLS, OF ALL SIZES Made to order. Engineers' Gongs made and hung in the best manner. Bank, Vault, Store and Prison Locks, also brass Padlocks and Shop Locks of various patterns, on hand and made to order.

\* \* \* Particular attention given to casting Rudder Braces and Ship Work in general.

All Jobs promptly attended to.—Prices moderate.

Removed from Oregon street, between Front and Davis.

P. DONAHUE. H. J. BOOTH. C. S. HIGGINS

## UNION

## IRON AND BRASS FOUNDRY.

The First Established in the State.) CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO.

## HAVING ADDED TO THE SEVERAL

Departments all the recently improved Tools, this Establishment is now the most Extensive and Complete of any on the Pacific Coast.

The undersigned are prepared to furnish, at short notice, Locomotive, Marine and Stationary Engines, of every size and description.

## BOILERS.

Locomotive, Flue, Tubular, Upright and Cylinder, furnished with or without engines, complete.

Machinery and Castings of every description, Saw-mills, Grist Mills, Car Wheels, Derrick Irons, etc.

## QUARTZ CRUSHING BATTERIES

Embracing a great variety of Stamp, Mortar and Cam Patterns.

## AMALGAMATING MACHINERY,

Varney's Improved Patent Pans and Settlers, Wakely Pans, Amalgamating Tube, Plated's Grinders, Chilo Mills, Concentrators, etc., etc.

## MINING PUMPS.

Cornish, Lift and Force Pumps, from four to eight feet stroke, with Pipes, Bob Mountings, and Gearing complete.

## HOISTING DRUMS.

For Shafts or Inclines, with clutch, friction or V cones. Sole Agents and Manufacturers for the Pacific Coast, of C. and G. M. Woodward's Celebrated Patent Safety Steam Pumps and Fire Engines.

All Contracts and Orders executed with promptness and dispatch, and at reduced prices for Cash.

DONAHUE, BOOTH &amp; CO.

Jc21 Washoe Correspondence.

## A. C. MORSE,

## Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

## HAVING MADE ARRANGEMENTS

with MRS. S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District



## THE COPPER INTEREST OF CALIFORNIA.

Notwithstanding the great attention which is now being attracted to the copper interest of this State, we apprehend that but a very imperfect idea of its actual present extent and importance is entertained by even well informed observers. Indeed, in the existing lack of statistical information, it is difficult for readers to inform themselves upon this point. The flush of excitement which a few months since pervaded the public mind has, in a measure, passed away and given place to active and persistent labor in developing the mines, and in bringing to the surface and shipping to a market the most valuable portion of the ores. Work enough of this description has been done to establish, beyond a doubt, a high value for quite a number of mines, and to afford reliable data for important calculations and estimates with regard to the future of this new branch of our mining industry.

It is now less than a year since W. K. Reed, the discoverer of the Union mine, in Copperopolis, sold six shares, or 975 feet, of that mine to the house of Meador, Lolor & Co., of this city, for the sum of \$65,000. The developments of the mine, since that sale have been such as to place its present actual value at fully \$1,200 per foot or \$1,140,000 for the interest sold by Reed. We have no idea that even the smallest interest could be purchased in this mine at the advanced rate above named. Probably \$1,500 would be a low estimate of the actual value of this mine per foot. We understand that no assessment was ever laid upon the Union Company's ground. Not even Washoe, with its famous Comstock lode of silver can make a better showing, in time and results.

Shipments of copper ore from this port to New York and Boston since the first of January last, inclusive of the cargo of the Mary L. Sutton, which sails, to-day, cannot be less than 4600 tons, with an aggregate value of full half a million of dollars. This is independent of no inconsiderable quantity which has gone forward to Europe on foreign account. The ore thus shipped, it should be borne in mind, is only a small portion of that which has been raised. As for instance, the Keystone mine has shipped, in all, from its first opening, about 1200 tons. In getting out this amount, they have also raised at least 10,000 tons, which still lies at the mouth of their mine, as second class ore, which, when concentrated by the machinery now being erected, will make about 4000 additional tons of shipping ore as good as the average of that which has gone forward. The Union Company has about 15000 tons of second class ore upon the surface, which is considerably richer than the Keystone, and which will probably yield, by concentration, about 7000 tons of fair shipping ore. These are the results of two mines only, obtained within about two years.

There are now some ten or twelve mines regularly shipping ore to this city, most of them in small quantities. It is true, but all pushing on the work of development with an energy which gives promise of a rapid increase and an early magnitude of the copper interest, fully commensurate with the highest degree of importance which has yet attached to it. In addition to these there are hundreds of others which have been discovered, a large proportion of which will undoubtedly be developed into paying mines.

It has been feared by many that the great increase of the copper yield foreshadowed by the wonderful discoveries in this State, will so effect the value of that metal as to bring it below the standard of a paying business. There need be no fears of that. Copper has been regularly advancing in price for many years. Even the Lake Superior mines, although they have nearly doubled the yield of that metal have not even checked the advance in its price.

It is, or should be, a well known fact that the Copper mines of Cornwall are giving out—that is, their yield is changing from copper to tin. Many of the once productive mines of Cornwall are now worked for tin only, the copper having gradually run into that metal, as the depth of the mine has increased. Chili, another great source of supply, is also decreasing its yield, with a fair prospect of an almost total cessation thereof. The fact is, the discovery of some new copper field had become almost a commercial necessity, when a fortunate accident turned the attention of California miners in that direction.

It appears to be one of the laws of an Overruling Providence that in all the great interests of human industry the supply is made to keep pace with the demand. The discovery of coal, the application of steam, and the invention of

gun powder are noticable instances of this great law. The discovery of new deposits of the precious metals had become almost a necessity to the increasing commercial wants of mankind, when the new gold fields of California were opened up. So of silver in Washoe, and copper, of a later date is no exception to this general rule. In support of the position we have taken with regard to the copper yield, we give the following from a recent number of the London Mining Journal:

"It appears from all information that can be obtained that the demand for metals is greatly on the increase, and must increase as nation after nation see the necessity of adopting liberal tariffs. The Copper Mining Interest has suffered more than any other branch of mining enterprise during the last two years. A wide spread rumour was circulated, some months ago, that the stock of copper in England was much greater than for many years past; but such is not the fact. The stock at the present time is, actually, much below what it has been for several years, and the returns from the mines, generally, greatly on the decline. At least twenty of the greatest mines in Cornwall, during the last forty years, may be said to be almost exhausted—for copper, and some of them are now ranked as tin mines, only. Several of the mines in Chili are reported to be nearly exhausted or have ceased to be of any commercial value, as they were surface deposits, principally, and the copper not found in regular veins or lodes as in this country; but mere carbonaceous blocks of copper on the surface. Foreign mines will not pay, as a rule, at a standard under £140 (\$700.) No doubt legitimate speculations in copper mines, at present, are some of the safest investments the public can embark their spare capital in."

**NEW QUARTZ MILL.**—Mr. John Center of the Mission Gardens, is putting up a Quartz Mill capable of reducing about 12 tons of rock per day, on Center Street, near the Mission Bridge. This Mill is being erected for experimental purposes. It is a crushing mill, on the principle of that now employed for similar purposes at the foot of Market St. The crushers will be graduated so as to bring the rock to the required fineness by a succession of rollers, after leaving which it will be subjected to the action of an improved Chili mill process. The amalgamating machinery will also be constructed on a new principle. We shall give a particular and probably illustrated description of this mill and machinery, when completed.

**THE HEPBURN & PIERSON PAN** is a new amalgamating pan which has recently been introduced into use at Virginia City, and which is highly spoken of. The *Esmeralda Star* says that it is about being put up in Gregory's mill, at Aurora. The *Star* further attests to three separate trials of this pan with as many others of different construction, in which the Hepburn & Pierson pan each time excelled its competitors. We have no knowledge of the merits of the pan, and know nothing of the principle upon which it operates. If the proprietors have a good machine, they will find it to their advantage to have its merits properly placed before the public. Illustrations are given in this paper, free of cost, where the parties furnish their own plates.

**PACIFIC BOARD OF BROKERS.**—A Board of Brokers, under the above title, was organized in this city on Tuesday, August 18, 1863. The following gentlemen were elected officers of the Board: James Hitchens, President; Wm. P. Denckla, Vice-President; Jas. H. Gager, Secretary; T. D. Mathewson, Treasurer; Chas. H. Watson, Sergeant-at-Arms. The Board meet daily at 12 M., for business, in the new rooms of Thos. Maguire, No. 606 Washington street, near Montgomery.

**FROM THE COLORADO.**—The *Los Angeles Star* says: Capt. Johnson, who arrived this week from the Colorado, brings with him specimens of ore, the richest yet exhibited here. Out of a piece of rock weighing two and a quarter pounds he obtained fourteen ounces of metal, copper and silver. For the want of proper implements he lost probably one-third of the metal. There are thousands of tons of such mineral on the surface: and it extends for leagues.

**CHEAP TRAVELING.**—A New York journalist says he made a trip from New York to Europe, paid for his passage and everything he had, journeyed over the continent and passed four months, for four hundred dollars.

## GAS AS A MOTIVE POWER.

The Paris "Scientific Press" gives a lengthy description of a new motive engine recently invented by M. Hugon, of that city, together with a philosophical explanation of the principles on which its action is founded. The article is quite too long to be transferred to our columns.

The idea of the application of gas as a motive power was first conceived about the year 1853. From that time to the present much ingenuity has been devoted to reducing it to some practical result. Models of the various improvements have been preserved, so that the curious in such matters can easily trace the gradual development of the idea, and identify the various stages of the discovery. The machine now presented by M. Hugon is described as being correct in principle and eminently practical in use.

## DESCRIPTION OF THE GAS ENGINE.

The generator, which corresponds with the boiler of steam-engines is a curved tube, in the form of the letter U; the summit of the smaller arm bears the valves of escape and of introduction, and the larger arm is provided with clacks, which remain closed by their own weight. The clacks open in the bottom of an upper reservoir. In a certain part (which is variable) of the great arm of the U tube is placed a welling, which serves to connect the tube with the cylinder. This is similar to the cylinder of a steam-engine, with this exception, that it bears two openings for the introduction and two for the escape, of the liquid. Over these orifices are placed four slides, two of them being in communication with the vacuum tube, and two with a basin in which the water driven from the tubes can be evacuated, the water being firstly poured out in the reservoir which surmounts the large arm of the U, and then passed into the bin by an over-flow pipe. The piston communicates the motion to a first-motion shaft, upon which are geared the different machines for giving movement to the pumps, blowers, of air or of gas, as well as to the different slides of the tube or cylinder.

These generators or tubes, above described, may be increased indefinitely, as it may be desirable to increase the power and so connected as to transmit to common cylinder the vacuum produced.

To cause the machine to work, it is necessary to fill with water the U tubes, the reservoir up to the overflow-pipe, the swellings that put the second branches the two generators in communication with the cylinder, the cylinder itself and the basin, up to a certain point. When the various organs of the machine are filled with water, a certain quantity of the explosive mixture is introduced into the valves at the top of the first generator, whose ignition determined by the electrical spark, or by an incandescent platinum wire, or by a gas-jet. The dilatation of the gases, tried immediately to a very high temperature, drives a certain portion of the water of the generator with great force through the clacks of the great branch, into the higher reservoir, which, in turn, allows it to flow into the great basin.

The valves are then opened and the piston is advanced by the motion of the slides. The consequence of the vacuum upon one face, and on the other by the water exposed to the atmospheric pressure, a force equal to the difference of the pressures exercise the two sides, or, to speak more plainly, with a force equal to that of the vacuum produced.

The piston, in advancing, causes the water which is upon the face directed toward the vacuum to replace a certain portion of that which has been driven out of the generator by the combination of gases. When it arrives at the end of its stroke the movement of the slides is reversed.

The above description if fully read, will convey some idea of the principle of a new and ingenious machine, which, may yet become an important instrument in advancing the great industrial and commercial interests of the world.

The speed of rotation the machine will depend upon the number of the generators, and the dimensions and forms of the openings for introduction and the escape of the water of the cylinder does not produce, in working, any vibration, or shock of kind; the heating of the water of circulation, after day's work, never exceeds 133°



Fahr.; and the consumption of gas is about 53 or 56 cubic feet per horse-power per hour.

The English *Journal of Gas Lighting*, from which we collate the above, promises further particulars with regard to experimental results, which we shall transfer to our columns whenever they come to hand.

#### RIGHTS OF WOMEN TO HOLD MINING CLAIMS

A correspondent of the *Virginia City Union* informs that a journal that some "smart individual" in the Monitor District is trying to secure mining ground and make his fortune by re-locating, in that district, all the claims that have been recorded in the names of women. The correspondent is also desirous of learning what rights women have for holding mining ground. The Editor of the *Union* correctly informs his correspondent that in law, husband and wife are one person, therefore no man can, by using the name of his wife in locating, hold two claims upon the same ledge. Of course this would not prevent him from locating a claim for his mother, sister, cousin, or any female in the world whose husband was not a locator on the same ledge, nor would it be any bar to the husband or wife acquiring, by purchase, an interest in the same ledge in which the other owns by location.

Plain as is the above proposition with regard to the unity in law, of man and wife, it is, nevertheless, not an uncommon thing, in many localities, for the name of the man and wife to appear as locators on the same ledge. Of course such titles are invalid. It is feared that much litigation is in store with regards to titles so held and conveyed. Much valuable mining ground in this State, has recently changed hands at high rates where the original title comes from locations made by man and wife upon the same ledge. Capitalists will do well to look closely after the character of their titles. There is a degree of looseness manifested with regard to mining titles that is seen nowhere else. There is no reason why the same circumspection should not be employed in searching into the validity of a mining title, that is always employed in looking after a purchase in real estate.

#### SILVER CITY, N. T., MINING NEWS.

**THE LADY ELLEN.**—The Lady Ellen Company's mine is situated in Silver City, near the spot where the roads to Carson and Dayton branch. Work upon this claim, which is one of the most promising in Silver City, is progressing energetically. The company are hard at work upon two shafts, sinking night and day, and have continued to take out pay rock from the surface down. They are now shipping rock to the regular mills which will pay about \$60 a ton.

**THE CHAMPION.**—The Champion is one of the best claims in Silver City. It is worked through a tunnel some two hundred feet in length; the ledge ranges from four to seven feet in width, and the rock pays about sixty to seventy dollars a ton. The crushing is done at Gears' mill in Carson.

**THE PIONEER CLAIM.**—Very rich rock was recently struck in the Pioneer Company's claim, Silver City. This claim, as its name imports, was among the earliest taken up in the Territory.

**THE CARSON CLAIM,** in Blue Sulphur Spring District, has recently turned out some fine looking ore.

**STATE OF WASHOE.**—Provided the people of Nevada Territory vote "Constitution, yes" on the 2nd day of September next, the delegates elected will assemble at Carson City, on the first Tuesday in November to frame a State Constitution.

**PIKE'S PEAK.**—The *Denver News* says matters are looking up in Colorado Territory. In some localities miners are realizing from \$10 to \$30 per diem to the hand. Georgia, American, Galena, Delaware, Gold Run and French Gulches, are said to be paying immensely. Everybody has plenty of money, and such prosperous times were never known before in those diggings.

The Pacific Mineral Company are shipping, the present week, to England, ores of copper, gold and silver. This shipment is made per ship "Orpheus."

The Pearl fishery in Ceylon the past year has realized over a million dollars.

#### THE MINING SHARE MARKET.

The excitement in the Mining Share Market heretofore, of late, noticed has somewhat subsided. Operations for the week past, though embracing quite a wide range of stocks, have been, with a few noticeable exceptions, rather at declining rates.

Ophir has advanced to \$2,500, on thirty days; Gould & Curry remains firm at \$4,750 (at \$4,800). A few August dividends have been sold for \$147 by irresolute holders. The more prominent holders of both Ophir and Gould & Curry, manifest quite an indifference to their market value, having full faith in the mine as a permanent dividend paying institution.

Chollar, early in the week, declined to \$900, but soon recovered to \$1,200 and closed at \$1,100, with small sales.

Potosi has advanced \$125 and is quoted at the round figure of \$1,000, with a firm market.

Sierra Nevada has been a favorite of the week. We quote at \$105—a material advance. Shares to the number of 422 have changed hands at rates ranging from \$87½ @ \$106.

Daney has been largely dealt in; 597 shares having changed hands at fluctuating rates, ranging from \$105 @ \$150.

Buckeye still continues the fancy of the market. It opened the week at \$40, a small advance, soon reached \$48, and finally closed at \$37½, a shade lower than the figure with which it closed the week previous. Several hundred shares of this stock are reported among the sales of the week.

North America, at Gold Hill, has been considerably in favor, 418 shares having changed hands—fluctuating from \$50 @ \$67.

Overman shares are still growing in favor. Opening with \$390, the closing bid of the previous week, they steadily advanced to \$495; and at the close \$510 was bid without finding sellers.

Burning Moscow, not much dealt in; dull at \$85. North Potosi, at \$40; Lucerne, at \$25; Lady Bryan, \$12½; Meredith, \$80; Burnside, \$5; El Dorado, closed at \$70; Sacramento, \$80; Madison, \$20; Bullion, G. H., 69; Pride of the West, \$95; Grass Valley, \$60.

North America, Gold Hill, has been much in favor, fluctuating from \$50 to \$67, with a large business.

ESMERALDA shares have not been largely dealt in. This district still seems to rest under a cloud, but the enterprise of its mining population, in their resolute efforts to develop their mines must soon bring it out brighter than ever. Strangers visiting that locality, are invariably surprised at the representations of the bears and other interested parties, in this city, with regard to the value of the mines. The camp is evidently deficient in effective mills, yet the average of the rock crushed there is fully equal, if not in excess, in point of yield to that crushed in Virginia City. The mines here are in fact just beginning to be developed, and it is safe to predict that another year will bring about results in this locality that will astonish even the most sanguine.

Wide West has been very little sold; dull \$145; Esmeralda, \$25; Bamboo, \$30; Pond, \$37½; Falls of Clyde, \$5; Ural, \$162½.

Josephine, Coso District, has been considerably dealt in.

#### COPPER.

The Copper interest still continues to attract a large share of attention. The regular arrival of ore from the interior; the gradual increase in yield of the older mines and the continual addition of new ones to the catalogue of those producing ore, considered in connection with the increasing aggregate of shipments East, to domestic and foreign ports, is giving a degree of importance to this growing interest which cannot fail to arrest the attention of our moneyed men. The "Mary L. Sutter" sails to-day, with about 600 tons of ore from the Napoleon, Union, Copper Hill and Alta mines. The The Pacific Mineral Company are also shipping, this week, per the "Osprey," to England, both copper ores of gold and silver. Active prospecting operations are still in progressing throughout the entire copper region, and quite a number of mines in addition to those already shipping, will soon commence sending their ores to market. The Wilson Copper mine, some six miles above Lincoln, is now putting up a twenty-horse power engine for hoisting and pumping, and will commence shipping ores as soon as their machinery gets to work.

#### REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending Aug. 22, 1883.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	227½	2300	2100	2300	2350	2300
Gould & Curry	4,800	4	500	4700	4500	4000	4050	4000	4750
Central	1,800	12	300	—	—	—	—	—	—
California	3,600	12	300	—	—	—	—	—	—
Chollar	2,800	2	500	950	900	900	915	1000	1100
Potosi	2,800	2	500	975	1000	—	950	850	950
Hale & Norcross	8,000	2	500	2000	2000	—	—	—	1800
Sierra Nevada	3,000	1	600	87½	98	99	100	100	100
Daney	8,000	4	600	165	160	155	167½	165	160
Burning Moscow	4,800	2	100	85	80	80	80	80	75
North Potosi	2,000	1	300	40	40	40	40	40	40
Rogers, F. D.	5,000	1	250	—	—	—	—	—	—
Meredith	7,200	2	125	—	—	—	60	—	41
Charles Canby	1,800	1	30	45	—	40	42	—	40
Sacramento	1,800	1	600	—	80	—	—	80	—
Lucerne	1,800	1	500	—	—	—	—	—	—
Lady Bryan	5,000	1	100	—	—	—	—	—	—
Savage	800	1	—	—	—	—	—	—	—
Iowa	—	—	—	—	—	—	—	—	—
El Dorado	—	—	—	76	76	70	70	67½	66
La Crose	1,000	1	—	—	—	—	—	—	—
Miss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Burnside	—	—	—	6	—	6	—	—	4½
Adriatic	—	—	—	3½	—	—	3½	—	3½
Brennan	—	—	—	—	—	—	—	—	—
Center Hill Tunnel	10,000	1	100	2½	2½	2½	2½	—	2½
Mount Davidson	10,000	1	200	—	—	—	—	—	—
Pride of the West	—	—	—	79	78	82	85	91	92½
G. H. Quarz M. Co.	—	—	—	—	—	—	—	—	—
Imperial	—	—	—	—	—	490	—	—	—
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	1	600	145	140	135	137½	140	146
Antelope	1,200	1	500	—	—	—	—	—	170
Esmeralda	1,600	1	1000	21	25	—	26	27½	27½
Royal Dol Monte	4,400	1	400	350	350	325	360	—	—
Elusa	1,200	1	100	—	—	—	—	—	—
Utah	1,600	—	250	60	58	—	—	59	52
Silver Hill	3,000	1	600	27	25	25	26	25	27
Nevada	1,200	—	250	—	—	15	16	—	—
Federal Hope	—	—	—	—	—	—	—	—	—
South Utah	—	—	—	—	—	—	—	—	—
Levy Lind	—	—	—	—	—	—	—	—	—
Falls of Clyde	—	—	—	5	—	—	6	4	—
Sunbeam, s. w. ex.	—	—	—	—	—	—	—	—	—
Bamboo	600	1	600	30	26	30	—	—	—
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	13½	14½	14½	13½	13	13
Coso	1,600	—	800	8	4½	6	9½	6	9½
Willow Springs	2,700	1	100	—	4½	6	7	6	6¼
Empire	—	—	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	—	1000	—	—	—	—	—	—
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	50	50	51	50	55	57½
Josephine	—	—	—	2	2	—	3	8	3
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	—	—	—	—	—	—	3½	—	3
Utica	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	—	—	—	—	—	—

#### SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.



## ESMERALDA MINING ITEMS

**THE UNIONVILLE TUNNEL CO.**, which commenced work in February last are pushing ahead vigorously. The *Star* says that this tunnel is not surpassed in workmanship by any other tunnel in the district. It is now in a distance of 375 feet. They have already struck four well defined ledges; the first of which will pay for working; the last one however which has been struck at a depth of 275 feet is a rich one in which free gold can be plainly seen. It is expected that this enterprise will bring to its owners a rich reward. It pierces the richest portion of Last Chance Hill.

**THE LAWTON LEDGE**, on Silver Hill has a shaft down to the depth of twenty-five feet. They have a lode about four feet wide.

**THE STANFORD TUNNEL** is now in about 150 feet. The latest indications were that they were in close proximity to a ledge. The workmen are now taking out rock of a bluish, green color, of a character which often lies contiguous to a silver bearing vein, and which almost invariably contains chloride of silver. This tunnel is bound to be one of the best paying enterprises in the district, its location is particularly advantageous, being at right angles with all the rich ledges on this side of the hill.

**THE ENTERPRISE TUNNEL** is about six hundred feet in length and running into Last Chance Hill. Very recently they struck a ledge seven feet wide. The rock shows sufficiently to justify—as some of the holders think—a raise in the stock.

The *Times* says the **CLAN ALPINE** company has a lot of rock at the Brodie mill and will soon know by actual practical illustration what it will pay.

**THE KORAN LEDGE** on Last Chance Hill is having a prospecting shaft sunk.

**THE CORTAZ CONSOLIDATION CO.**, on Silver Hill are sinking a prospecting shaft.

**RICH.**—Twenty-one tons of ore from the Aurora lode, one of the ledges belonging to the Real del Monte Consolidation, yielded at a late crushing \$4,347, being \$207 to the ton. The ore was not assorted. There is no danger that a mining district turning our large quantities of such ore as this, will ever fail to sustain itself.

**THE UNION FOUNDRY** in process of erection at Aurora by Mr. Geo. W. Coffee, is nearly completed. The *Times* speaks most flatteringly of the completeness of this institution, and justly calculates on large advantages to be derived therefrom for that camp.

## The Pacific Mineral Company

**MAKE LIBERAL ADVANCES UPON THE ORES OF COPPER, SILVER, TIN, NICKEL, COBALT, ZINC, LEAD, AND SULPHURETS CONTAINING GOLD.** Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, OLD FELLOWS' HALL,  
1st-1st Montgomery Street, San Francisco.

## SQUARZA'S PUNCH.

## FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1892.

## ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1892

MANUFACTORY, WHOLESALE AND RETAIL,  
No. 44 Leidesdorff street,  
Opposite the What Cheer House, San Francisco.

**International Hotel,**  
JACKSON STREET, ----- SAN FRANCISCO  
[A few doors above Montgomery.]  
**FIRE-PROOF BRICK BUILDING.**  
Most convenient to the  
Steamer's Landing, Business sts. & Places of Amusement  
**OPEN ALL NIGHT.**  
City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop.  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**  
and sets as good a table as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

## Tremont House,

418 and 420 ----- Jackson Street,  
[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY** advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,  
WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL  
F. E. WEYGANT, PROPRIETOR.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

**NATHANIEL GRAY,**  
General Furnishing Undertaker,  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

## FULTON FOUNDRY &amp; IRON WORKS

## HINCKLEY &amp; CO.,

MANUFACTURERS OF

## Steam Engines

QUARTZ, FLOUR AND SAW MILLS; CAST IRON  
FRONTS, FOR BUILDINGS, MINING PUMPS,  
AND ALL KINDS OF MACHINERY, ETC.,

FIRST STREET,

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\* \* All kinds of IRON and BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done.  
PATTERN MAKING in all its various forms. Prices low.  
D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

## LEWIS COFFEY AND RISDON,

## STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

## To Mining Companies about to Incorporate.

**JOHN ARMSTRONG,**  
CONVEYANCER,  
610 Merchant Street,  
San Francisco.  
Is Prepared to draw with Accuracy and Dispatch,  
Certificates of Incorporation—Trust Deeds,  
and all other Papers,  
necessary to the correct Incorporation of Mining Companies, on reasonable terms.  
All letters of enquiry cheerfully and promptly answered. Address as above. Jy27

R. W. FISHBOURNE,

PRACTICAL LITHOGRAPHER,  
ENGRAVER AND PRINTER,

No. 529 CLAY ST., CORNER OF LEIDESDORFF,  
San Francisco. State and County Bonds, Stock  
Certificates, Bills of Exchange, Bills of Lading, Bank  
Checks, Landscapes, Architectural and Marine Views  
Show Cards, Labels, Etc., executed with neatness and  
dispatch. N. B. All orders in Crayon Work promptly  
attended to.

## MINING.

N. B. Mining Stock Certificates executed with promptness and dispatch, and at greatly reduced rates. Jy6

## MARTIN &amp; Co.,

OFFICE--224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

## Purchase of Copper Ores,

Assaying 8 per cent and upwards of Copper to the Ton  
We will make ADVANCES upon Ores of COPPER, TIN  
and NICKEL.  
Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN,

New York.

J. F. GREENMAN,

San Francisco.

San Francisco Post Office, Box 1259.  
je 1.

## John R. Sims,



Oregon street, between Washington and Davis and Froon and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and** Shutters, Bulk Vaults, Grating, Cemetery Railings. All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

## Mr. Sims Appreciates the Past

liberal patronage of his friends, and trusts that he may continue to merit it in the future.

## For the Information of Strangers

he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, set to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attests. A large assortment of second hand shutters for sale at low rates. ap13

## LEANDER RANSOM,

## Civil Engineer

AND

## SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

## STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.

OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct 3m



## DR. H. AUSTIN,

## DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. Jy29

## To Mining Companies.

**FOR SALE**—A STEAM ENGINE AND BOILER. THE Engine is 30 horse power—10 inch cylinder—24 inch stroke—solid iron frame, with heater, pumps, etc., all complete. The boiler has 5 flues, is 24 feet long, 40 inches in diameter, made up from the best three-eighths inch Low Moor Iron, and weighs about 5000 pounds. Both Engine and Boiler are in perfect order and fully guaranteed. Apply to  
I. H. HAM, No. 211 Clay st.  
San Francisco, June 13, 1893. 3t

## DESKS

AND

Office Furniture,  
OF ALL KINDS.....FOR SALE BY

**JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO

OFFICE JOBING, of all kinds, attended to.

**PALMER, HANSCOM & CO.,**

## GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds.

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

## To Quartz Miners.

Knorr's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOMB & CO.,

GOLDEN STATE IRON WORKS,

Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. W. A. PALMER.

## T. C. Sanborn &amp; Co.

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

OPHIR SILVER MINING STOCK,

GOULD & CURRY MINING STOCK,

CHOLLAR MINING STOCK,

CALIFORNIA STEAM NAVIGATION CO'S STOCK,

BOUGHT & SOLD.

## DEETKEN'S

Chemical and Metallurgical Works

On San Bruno Road, Islais Creek,  
SAN FRANCISCO.

**GOLD BEARING SULPHURETS WORKED AT REASONABLE RATES.** ALL THE GOLD EXTRACTED by Chemical process. Yield of Sulphurets from 50 to 60 per cent higher than the BEST AMALGAMATION PROCESS.  
Apparatus for separating Sulphurets set up by experienced hands at a cost of \$50 to \$100, if desired by mill owners. No power nor clean water required for purpose. nov8-3m

## W. T. &amp; J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE** and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joint Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistle HYDRAULIC PIPES and NOZZLES for MINING PURPOSES. Iron steam pipe furnished with fittings, & COUPLING JOINTS OF ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."

## THEODOR KALLENBERG

Maker of Models

FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.;** Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.  
No. 418 Market street, San Francisco.  
Jy3m) San Francisco.



## THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.

H. T. FELTON - - - W. C. MINOR,  
PROPRIETORS.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Railroad House Coach is always in attendance at the steamers to convey passengers and their baggage to the House Free of Charge.

The House is open all night.

## HIRAM WRIGHT, PICK MAKER,

Has established a Manufactory for the Making of  
MINER'S PICKS,

at  
NO. 121 FOST STREET, SAN FRANCISCO,  
(Between Montgomery and Sansone.)  
Where can be had a superior Pick for Miners use  
As he manufactures all his picks under his own personal supervision, he warrants them as being made of the best material and by the best workmanship.

Orders attended to and filled promptly and with dispatch.

aug17

## D. NORCROSS,

Masonic Temple, No. 6, Post Street.

Military Goods of all Descriptions.  
Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.

aug 17

J. F. MILLER. W. C. COLEY.

## MILLER & COLEY,

Stock Brokers & Mining Agents  
327 MONTGOMERY STREET,  
Between California and Pine, in Jerome Rice & Co's Real Estate Sales Rooms, San Francisco.

ALL KINDS OF STOCK AND MINING  
Business attended to with Promptness  
and Dispatch

aug17

## REYNOLDS'

Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

127 of these Invaluable Machines,  
ARE NOW IN USE  
In California and Nevada Territory, giving a perfectly regular motion and  
Saving 20 to 65 per cent of the Fuel.

### Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Mill Works, and at the Stone Breaker, foot of Market Street, San Francisco.

### Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

Ingersoll's Patent Drill Press,  
With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

Felt for Steam Boilers, Pipes, Etc.,  
At the lowest market rates.

Steam Engines, Boilers, Pipes,  
Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

### Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past eight years.  
Refer to—Sugar Refinery, San Francisco,  
Cottell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.

E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

## ASSAYS!

Promptness and Accuracy Secured

By THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

J. H. CHURCHILL, M. A.,  
(FROM A. R. R. R.)

Room 24 Government Block, corner of Sansone and  
Washington Streets, San Francisco. jly 6

FREDERICK MANSELL,  
MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,

No. 222 California street, corner of Leidesdorff

Drawings of Monuments made for parties applying for patents at Washington or London. mar 23 2m

### New Style of Ladies' Buckle!

W. BOHM,

INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It exceeds all other buckles in

### Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine this Buckle at the Jewellery Establishment of

BRADFORDMAN & LEVY,

621 Washington Street, San Francisco.

JOSEPH BROTHERS,

607 Montgomery Street, San Francisco.

FLORELL & CONRAD,

118 I Street, Sacramento.

Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm" will be guaranteed as to its Strength and Durability.

jy 27

W. BOHM, Patentee.

WILLIAM BRODIE & CO.,

CALIFORNIA FOUNDRY,

Fremont Street, near Market, San Francisco.

### Light and Heavy Castings,

Of Every Description, Made to Order. Particular attention paid to all kinds of House Work, Plain and Ornamental.

jy13

### Giffards Injectors,

FOR SUPPLYING BOILERS WITH FEED WATER without Pumps. No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODDART, Agent.  
je22 Cor. Pine and Front Sts., San Francisco.

I. C. E. KLEPZIG & CO.,

GUN MAKERS,

AND

DEALERS IN GUN MATERIALS,

733 Washington street, San Francisco,

(One Door above Kearney street.)

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Ekland. je21

## BAUNCHEIDTISM,

THE PRESERVER AND PRODUCER OF LIFE.

THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF curing disease, is a "fait accompli" in medicine, and needs no more proof. The public has crowned Baunceidism already with an extraordinary patronage, and it is acknowledged by all men of science that BAUNCHEIDTISM is founded on a rational, scientific basis.

It can safely, and with sure success be applied to paralysis in consequence of Apoplexy, Palsy and Rheumatism of every description, which kind of complaints can find their only relief by the above method.

Especially can it be applied successfully, in the spring of the year to disease of the eye.

Dr. Borchers is the only doctor in California who has the original series of Dr. BAUNCHEIDT and his original oil. Dr. Borchers is also in possession of original letters of the inventor of the method by which he can prove that he is perfect master of the latter.

DR. J. C. BORCHERS.

No. 19 Kearney street, and No. 4, Mark's Place, First story, No. 5. Office hours from 9 to 11 A. M., and 1 to 4, and 7 to 9 P. M. je 21

## THE

## BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

### METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the Improvements which the experience of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron, and consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent. more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1860, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed is cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petallama Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hewes, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino.

MANUFACTURED ONLY BY

GODDARD & CO.,

At the Pacific Iron Works.

SAN FRANCISCO.

os 125 to 136 First street, and 126 to 144

Fremont street.

## VIRGINIA CITY MINING ITEMS.

The BEST & BELCHER Co., recently purchased and paid \$10,000 for a private residence which they found in the way of working their ground. The improvement will be moved off. None but a rich company can afford to pay such prices for the removal of incumbrances.

The Stock Books of the Buena Vista Company having been destroyed by the fire which consumed the Pioneer Foundry. The Company will re-unite their stock in lithograph.

An assay of rock from the Athens ledge, near Carson, showed \$3,550 in gold and \$11 50 in silver. The company are within fifty or sixty feet of the ledge with their tunnel, and will strike it about 100 feet below the surface.

STRUCK IT.—The laborers in the Golden Gate shaft have struck water, at a depth of three hundred and twenty-nine feet. The Company will commence drifting west immediately. The Golden Wedge Company, which, in connection with the Golden Gate Company, sunk the shaft, will commence drifting east.

## P. M. S. C. O.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

### FOR PANAMA.

The following Steamships will be dispatched in the month of May, 1863.

Aug. 3d, - - - - Steamer Orizaba.

Aug. 13th, - - - Steamer Golden Age.

Aug. 23d, - - - Steamer St. Louis.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.  
And connect, via Panama Railroad, at Aspinwall, with steamships for New York.  
For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidesdorff sts.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

## D. MORRIS, MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

### WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. je13

### REMOVAL.

OFFICE OF THE PACIFIC METAL  
The Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Sil Vermith's sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansone.

## CALIFORNIA TOOL WORKS!

John Weichhart,

Manufacturer of

All Kinds of Edge Tools, Etc.,

Plane Irons

Moulding Irons,

Stone Cutter's Tools, etc

No. 22 Fremont street, bet Market and Mission,  
San Francisco, July 14, 1863. jy 20



**Winona Gold and Silver Mining Company.**—The first annual meeting of the stockholders of the Winona Gold and Silver Mining Company, will be held at the Company's office, No. 428 Montgomery street, for the election of five Trustees for the ensuing year, on the 19th day of September, 1863, at 7½ P. M. By order of the Board of Trustees, M. G. ELMORE, Sec'y.  
aug24

**Red Jacket Mining Company.**—At a meeting of the Board of Trustees of the above company held July 7, 1863, the first assessment of Five Cents per share on the capital stock was levied, payable immediately in United States gold coin, to the Secretary, office 420 Montgomery street, Room No. 2. By order of the Board, J. W. CROSLY, Secretary.  
aug24

**Figaro Gold and Silver Mining Com'y.**—Location of mine, Alpine District, Amador County, Cal. Notice.—At a meeting of the Board of Trustees, held this 11th day of August, 1863, at their office in this city, an assessment of Twenty (20) Cents on the Capital Stock of the Figaro Gold and Silver Mining Company was duly levied, and is payable immediately, in gold coin, at 512 Sansome street, to  
aug24 ALEX. STOTT, Secretary.

**Office Table Mountain Copper Mining Company.**—At a meeting of the Board of Trustees of this Company, held July 25, 1863, an assessment of Thirty Cents per share was levied upon the capital stock of said Company, payable immediately in United States gold coin to the Secretary, at the office of the Company, No. 528 Montgomery street, or to J. M. Pike, Superintendent, at Copperopolis. M. G. ELMORE, Secretary.  
aug24

**Grey Ledge Gold and Silver Mining Company.**—Office No. 528 Montgomery street, San Francisco.—All stock on which assessment is not paid will be advertised as delinquent on the TWENTY FOURTH DAY OF AUGUST. M. G. ELMORE, Secretary.  
aug24

**Office of the Niagara Consolidated Gold and Silver Mining Company, Eldorado Canon.**—Notice is hereby given that the Board of Trustees have this day levied an assessment of Twenty-five Cents per share upon each and every share of the capital stock of the said Company, payable in U. S. gold coin immediately to the Secretary, at the office of the Company, No. 528 Montgomery street, or to the Contractor at the Canon. M. G. ELMORE, Secretary.  
San Francisco, July 20, 1863. aug24

**TO MINING COMPANIES!**  
**Offices To Let.**  
SUITES OR SINGLE ROOMS,  
IN  
Government Block,  
N. W. Cor. of Sansome and Washington sts.  
au-24

**VULCAN IRON WORKS COMPANY,**  
P. Torquet, Manager,  
STEAM ENGINE BUILDERS  
and  
BOILER MAKERS,  
Iron Founders and General Engineers,  
No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing Machinery.  
Shoes and Dies of the hardest iron,  
Russia iron Punched Screens.  
Steamboat Machinery; Saw, Flour and Sugar Mills.  
High and Low Pressure Boilers of all Styles.  
JOURNAL and other Turbine Water Wheels with latest improvements.

GEO. A. MITCHELL. D. S. HUTCHINSON.

**METOLAF & HUTCHINSON'S**  
**PHOTOGRAPHIC GALLERY,**  
650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

**CARD PICTURES.**  
As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

**\$3. Per Dozen!**  
Large sized Photographs \$3—Extra copies \$1 each.  
AMBRYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.  
Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist.  
aug.

**Napoleon Copper Mining Company.**  
Capital Stock.....\$1,620,000.  
2,700 Shares—\$600 Per Share.  
Length of Lead 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACRELLISH  
Secretary.....O. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....R. C. ALDEN

**TRUSTEES.**  
F. MACRELLISH, of Alta California  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
A. W. HASKELL.  
Office of Company, No. 420 Montgomery street.  
je29

**San Antonio Gold and Silver Mines,**  
LOWER CALIFORNIA,  
**FORWARDING & MINING AGENCY.**  
SAMUEL SMITH,  
OFFICE—North West Corner of Front and Clay Streets, San Francisco.

**MINING MACHINERY AND MERCHANDISE** Forwarded, Mining Claims secured, through the resident Agent at San Antonio, and information furnished regarding any claim, in that Territory, on Commission.  
je-26

**FOR SALE.**  
**PATENT PRESSED RUSSIA IRON MINING PANS.**  
Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Corks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Bars; Iron Rivets; Etc.

We are also manufacturers of the  
**UNRQUALLED**  
**MONITOR COOKING STOVE**  
**OR RANGE,**  
FOR HOTELS.  
To which we call particular attention.  
je-29 TAY, BROOKS & BACKUS.

**MOYNIHAN & AITKEN,**  
Boiler Makers and Blacksmiths,  
Mission, between Beal & Fremont Sts,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms.  
je 29

**L. F. LELAND,**  
**STOCK BROKER,**  
No. 621 Clay street,  
Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.  
Member of the San Francisco Stock and Exchange Board  
je-29

**MYERS & DAGGETT'S**  
Mining and Stock Exchange,  
No. 23½ B Street, Virginia City, N. T.  
**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every description promptly and confidentially attended to.  
\*\* Abstracts of Titles Furnished, Etc.

**AGENCY**  
For the Purchase and Sale of  
**MEXICAN MINING STOCKS**  
At No. 411 Clay Street, San Francisco.  
OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.  
All persons are invited to call and examine Ores from the above mines.  
je13 Wm. FAULKNER.

**H. C. KIBBE,**  
**MINING SECRETARY,**  
Commissioner for Nevada Territory,  
542 Sacramento st., cor. Montgomery  
(ARMORY HALL.)

**EXCELSIOR IRON WORKS,**  
712 Sansome street,  
Between Jackson and Pacific, San Francisco.  
**GALLAGHER & KENNEY,**  
Manufacturers of all kinds of  
Architectural and Ornamental Iron Work,  
Bank and Store Vaults, Safes, Doors, Shutters, Bul-  
cony, Area and Cemetery Railings, Gates, Stairs,  
Etc., and all kinds of Blacksmithing and Job-  
bing done with promptness, and at  
Reasonable Prices.  
Orders from the country promptly attended to.  
je13

**APARTMENTS.**  
**FURNISHED APARTMENTS, WITH OR WITHOUT** Board, at 1018 Powell Street, between Clay and Washington Street. Persons desirous of a respectable home will do well to apply  
je6

**E. C. DAKE,**  
DEALER IN  
**CLOTHING,**  
AND  
**Gentlemen's Furnishing Goods;**  
ALSO  
**HATS, CAPS, ETC.**

At THE NEW YORK CLOTHING STORE,  
541 & 543 Washington st. Montg'my Bk  
je] Old No. 145. [29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY  
**PEASE, BOWLEY & CO.,**  
Real Estate, Stock and Exchange  
**BROKERS,**  
621 Montgomery street, San Francisco.

**LEGAL TENDER NOTES AND MINING STOCKS,**  
**BOUGHT & SOLD.**  
je-29

**PUMPS!**  
**HARRISON'S**  
**California Lift and Force Pump,**  
WITHOUT VALVES OR PACKING,  
Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

**ALL SIZES;**  
Capable of throwing from ONE HUNDRED TO FIVE THOUSAND Gallons per Minute—For sale by  
**C. H. HARRISON,**  
PHOENIX OIL WORKS,  
je-15 517 Front Street, San Francisco.

**New Bedford Copper Company.**

**THE UNDERSIGNED HAVING BEEN APPOINTED** Agents for the above Company, are receiving regular supplies of their superior manufactures of  
**SHEATHING COPPER;**  
**BRAZIER'S COPPER;**  
**COPPER BOLTS;**  
**YELLOW SHEATHING METAL;**  
**COPPER AND COMPOSITION NAILS;**  
Which they offer to the Trade at the lowest market rate, and on the most favorable terms.  
MORGAN, STONE & Co  
je-29 108 Front Street, San Francisco.

**IMPORTANT!**  
To Mining Companies, Miners,  
Prospecting Parties, Commanders  
of Ships, &c., &c., &c.

**THE UNDERSIGNED HAS RECEIVED** a new supply of the celebrated  
**DESICATED AND COMPRESSED**  
**VEGETABLES,**

Of Messrs. CHOLLET & CO., PARIS, which he offers now for sale in lots to suit.  
These Vegetables being perfectly fresh and sweet, are the best preventive of scurvy and other diseases result-  
ing from the continued use of salt provisions.  
They are already cleaned and prepared for cooking; are perfectly preserved, and offer great advantages for transportation. 25,000 rations being packed in the space of one square yard, while 2,000 rations—or equal to 1,000 lbs fresh vegetables—occupy only from 100 to 125 pounds.  
**CHARLES MEINECKE**  
aug 3 No. 215 Front street,

**Offices To Let,**  
In the Government House, Corner of Washington and Sanson Streets. Two large suits of Offices, the most commodious and accessible in the city.  
C. A. CRANE, Proprietor

**Eye, Ear and Throat.**  
**DR. DE CASTRO,**  
Oculist and Aurist,

**WHO HAS PRACTISED IN NEW** York and all the principal cities of Europe with such unrivalled success, and from each place is in possession of the most eminent testimonials, may now be consulted upon diseases of these delicate organs, with a view to their permanent cure. Dr. De Castro's long standing thoroughly cured. The Doctor employs his (by the Medical Society of London approved)

**Self-adjusting Artificial Tympanum,**  
For the relief of deafness, attended by loss or injury of the membrana tympani, and for the cure of discharge from the ear—the invention of Dr. Castro, M. D., author of "Deafness Practically Illustrated as to its Nature and Treatment," etc.

The self-adjusting Artificial Tympanum was first introduced to the notice of the profession at the meeting of the Medical Society of London, on the 20th of November 1863. An animated discussion ensued on the reading of the paper, and several members of the Society bore testimony to the success of the remedy and the importance of the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-Adjusting Artificial Tympanum, as he had observed the immense benefit a young lady friend of his had received from it. She was in fact, quite deaf, and in a most miserable state: the effect of the tympanum was instantaneous—quite like a miracle. Five more testimonials from Members of the Medical College, New York, and the principal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and Kearny streets. Entrance on Market street.

**Mr. Editor—Having been afflicted** with deafness for the last two years, originating from a severe cold, and for the last month suffering from the most excruciating pains in my ear, I was obliged to come down to San Francisco to seek relief. After a physician's recommendation to wait on Dr. De Castro, on the corner of Kearny and Market streets, and underwent one operation, and it was with the utmost pleasure I can say my hearing was suddenly and without pain entirely restored. I deem it my duty to make this known to the public, and to recommend Dr. De Castro's skill as an aurist.  
JOHN REESE, Napa Valley.  
James Colloghan, witness.  
San Francisco, July 30th, 1863.

[From the Daily Alta.]  
San Francisco, June 30th, 1863.

**ED'S DAILY ALTA:**  
Permit me through your widely circulated journal, to say, that my daughter Mary Ellen, has been afflicted with deafness since she was thirteen months old, and that she has been a member of the Deaf and Dumb Institute since it was organized. On taking her to Dr. De Castro, on the corner of Kearny and Market Streets, and undergoing under his direction, two operations, she has heard sounds very distinctly; and is now, I am happy to state in a fair way to get permanent relief. The result, thus far, is satisfactory; and I deem this notice due to Dr. De Castro for his skill; and would recommend all parties similarly afflicted to give him a trial. My daughter has at different times been under the care of the most skillful physicians and aurists in California, but up to the period of visiting Dr. De Castro, received no benefit.  
CHAS JOHN P. WRIGHT,  
812 Green Street.

**MINING CERTIFICATE LOST!**

Certificate for Ten Shares, No. 33, dated July 8th, 1863, of Tamplins Gold and Silver Mining Company. The finder will be suitably rewarded by leaving it at room 24, Government Block.

LOUIS EDWARDS.

**CHARLES GEDDES,**  
**ARCHITECT,**  
Cor. Montgomery and Bush Streets,  
Over the Mercantile Library Rooms.  
je 20 San Francisco



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, AUGUST 31. 1863. NO. 44.

## REMOVAL.

The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing more room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.

## ON FLUXES.

This subject is one which has been brought before the public of San Francisco, this week, by several of our contemporaries, and one flux which has been variously described, as "a silicate of cadmium," a silicate of manganese," and a silicious deposit containing animalculæ," has been considerably lauded for copper—Roasting, or something else in addition, or as a preliminary, being omitted, or not, according to the judgment of the operator. Amid all the mystery this appears to contain, we have been shown copper, melted when this "flux" (?) has been used conjointly with another. We have also seen buttons of copper obtained where "previous knowledge of smelting" was employed, and where, therefore, something tangible besides this flux was probably put in the pot. These are the only authentic cases of success we have heard of. We know failures abound. One of the successful manipulators admits that it is not applicable for use in a cupola. In contrast with this, we cite from a recent paper by our rising chemist, Prof. Joy of New York, the following beautiful application of scientific knowledge to this subject.

In treating beryl, to obtain glucinum, "One part of beryl was fused with three parts of fluorid of potassium, and digested in sulphuric acid." He adds: "If this flux could, be obtained in sufficient quantity, the method would be preferable to all others, as the mass fuses easily, the fluorid of silicon is driven off at a gentle heat, and the potash alum crystallizes readily, carrying down all of the alumina, thus at the same time accomplishing the decomposition of the silicate and the separation of the alumina and glucina."

**GEOLOGICAL POSITION OF THE VEINS OF PRECIOUS METALS IN WASHOE AND REESE RIVER.**—The Reese River *Reveille* says:—The mines of Washoe are in syenite, porphyry, and other granite rocks. Reese River presents one series of mines in granite, as about Austin City; another in metamorphic shales, as in Smoky Valley and Big Creek. The Comet vein traverses slate. The heaviest masses of native metallic silver have been found in veins traversing shales; and, on the other hand, the large masses of chlorid of silver in South America have been the product of veins in metamorphic limestone. Oxid of silver is a rare ore, but is occasionally met with in Mexico and South America, and in the veins about Austin. It is mostly found in veins traversing granite."

[COMMUNICATED.]

Mr. Editor:—"A Poor Chemist" will find the properties of Hydrochloric acid when used in qualitative analysis fully described in tables prepared for laboratory use, by Dr. Hoffman of the Royal College of Chemistry, London. You may rest assured, Mr. Editor, that I will not mislead your numerous readers in describing to them the tests for metals. Did time permit me, I would answer "A Poor Chemist" more fully, and ere I complete these papers I may fall upon him again. P.

**FROM EL DORADO COUNTY.**—We have been shown some very good auriferous rock from the Baltic and Harman ledges of Placerville. The Baltic, at a depth of 25 feet, is producing rock which yields twenty-five dollars per ton.

The Hoffman at a depth of 75 feet is producing 35 dollars to the ton. It is believed that these ledges will rank second only to the New York mine, of that vicinity.

**THE NEWSOM Gold and Silver Mining Company** is located half a mile from Silver City, and is the north extension of the Buckeye. The Company have sunk a shaft on the ledge to a depth of seventy-five feet, and are taking out about two tons of pyrite rock per day. The ledge is six feet wide, steadily increasing in width and richness. There are now out about 40 tons of quartz which the Company intend to crushed at one of the adjoining mills, the proceeds to be used in developing the mine.

**SULPHUR.**—A large field of Sulphur has recently been discovered, near the Lassen Meadows on the Humboldt. It covers some sixty acres, from one to three feet thick, so far as explored, but it is thought that further explorations will develop its still further extent beneath the surface of the ground. This discovery is a very important one, to that district of country, as it will afford an abundant and cheap supply of the raw material to the sulphuric acid manufactory now about going into operation near Carson City. This factory, alone, will consume about one ton of sulphur each week. As the mines are opened up other factories will soon be required, and an enormous quantity of this material will be needed soon.

**NEW MINING SUITS IN WASHOE.**—The following mining suits were commenced in the District Court at Virginia City on the 19th and 22d inst:—Heiss vs. Woodruff et als., to recover thirty-seven and a half feet in the Belcher claim, Gold Hill. Patrick Keenan vs. H. Harris & Co., to recover the sum of fifteen hundred dollars. A. S. Olin vs. Samuel Welch—attachment suit. Joseph Barnett vs. J. H. Mallett, to obtain an injunction restraining a suit in the Civil Probate Court by defendant against plaintiff, for possession of a store on C street, adjoining Wells, Fargo & Co.'s. Potosi Gold and Silver Mining Company vs. Junction Gold and Silver Mining Company, to obtain an injunction restraining the Junction Company from working on ground claimed by the Potosi Company.

The oldest newspaper in the world is printed at Pekin, in China. It is upwards of 1000 years old.

## MATTERS IN ESMERALDA.

Correspondents from Esmeralda report large quantities of quartz lying around the mines, betokening large shipments of bullion during the approaching Fall and Winter. A lack of facilities for crushing keeps this treasure back for the present. A correspondent of August 2d writes:—

"The Del Monte has a large amount of quartz out, but is not working now. The Pond is in the same position. The Ural is hard at work, and has some 60 tons of ore at Gregory's mill to be crushed. From the kind on hand at the mine, the chances are that it will yield largely. The Western Summit has one of the finest opened mines I have seen; the rock looks fine, and the Company will have a crushing so soon as the Ural rock is worked. Burlington ledge looks well, is clearly defined, and free from all "entangling alliances." The shaft is down about forty feet, and is being worked day and night. The Clan Alpine, in the same vicinity, looks well; 16 tons of their ore crushed last week at Bodie's mill yielded \$86 per ton. Work on many other prominent claims remains pretty much as at my last.

In the town, building is going on steadily, and by winter time we shall have a number of as fine brick buildings as can be found east of San Francisco. The weather is warm, and the general health of the inhabitants is good."

**THE CRESUS**, owned entirely by Messrs. Cralle and Johnson, on Last Chance Hill, is down to the depth of sixty feet, and the rock increases in richness as they go down. The gold is plainly visible in most every piece of the rock assorted for crushing. Twenty tons have been sent to the Pine Creek Mill to be crushed.

One shaft of the Antelope is down 140 feet. The rock all the way down increasing in richness.

**SILVER** hill consolidation keep men steadily at work taking out ore and developing their mine. The Brodie mill worked a lot of their ore recently—the yield of which we have not yet ascertained.

According to the *Times*, the Howard Company have struck it rich. A ledge has been found which surpasses any ledge that has yet been found in any tunnel in Esmeralda District. The work of running through the ledge is progressing, and from present appearances it will take several days to work through it. The tunnel is in a distance of three hundred and forty feet, and is now in the mineral range and liable to find valuable ledges at any time.

There has been considerable talk about Bodie district within the last few weeks. From all accounts, the ledges and claims there are large and well defined, clear of all dispute, and, so far as opened, rich.

The Bamboo has nearly completed its air shaft, and rich developments are looked for, daily, in that mine. The Crockett is taking out large quantities of fine ore, and will soon have another crushing. The last lot of 80 tons yielded about \$80 per ton.

The Ural Company has ten men steadily at work taking rock from their vein. At the depth of 120 feet the vein is 7 feet wide with the rock improving, as the workmen descend.



## THE MINERS' LABORATORY.—NO. XIII.

## SILVER.

*Fahlerz*, (Grey copper,) lustre metallic, steel-gray, iron-black, dark red, rather brittle; specific gravity 4.5 to 5.2.

When heated in an open tube it yields fumes of antimony sulphuric acid, and sometimes arsenic. Before the blowpipe on charcoal, decrepitates, emits the smell of burning sulphur, deposits a sublimate on the charcoal, and melts easily into a steel-gray slag, which is usually magnetic; and with borax melts into a gray metallic globule of copper.

## ANALYSIS.

	1	2	3	4	5	6
Copper,	37.98	38.63	40.60	38.42	34.48	25.23
Silver,	0.62	2.37	0.60	0.83	4.97	17.71
Iron,	0.86	4.89	4.66	1.52	2.27	3.72
Zinc,	7.29	2.76	3.69	7.85	5.55	2.19
Antimony,	23.94	17.52	12.46	25.27	28.24	26.63
Arsenic,	2.88	7.21	10.19	2.26	—	—
Sulphur,	25.77	26.33	26.83	25.03	24.73	23.52

	7	8
Copper,	14.81	30.47
Lead,	—	0.78
Silver,	31.29	10.48
Iron,	5.98	3.52
Zinc,	0.99	3.30
Antimony,	24.63	26.56
Arsenic	—	—
Sulphur,	21.17	24.88

Occurs in beds with talcite, chalcite, quartz, in veins with galena, blende and baryte.

*Freislebenite*: lustre metallic, steel-grey, streak the same, brittle, specific gravity, 6.00 to 6.38.

Before the blowpipe on charcoal deposits a sublimate of oxide of lead and antimony, and yields a globule of silver which sometimes imparts the color of copper to borax.

## ANALYSIS.

Silver,	23.76	22.81
Lead,	30.08	30.00
Iron,	—	0.11
Copper,	—	1.22
Antimony,	27.05	27.72
Sulphur,	18.71	18.77

Occurs in crystals, massive and disseminated.

This is a very rare mineral, and is found in veins in gneiss with galena, antimony, pyrrhyrite, pyrite, chalybite, calcite quartz.

*Proustite*; red silver, (in part,) lustre adamantine, cochineal red, carmine red; streak, aurora red, cochineal red; slightly sectile; specific gravity, 5.5, to 5.6, decrepitates when heated; melts easily before the blowpipe on charcoal, yielding sulphurous acid and a strong smell of arsenic, leaving a brittle globule, reducible with difficulty to pure silver. Partially soluble in nitric acid, leaves a residue of sulphurous and arsenic acid.

## ANALYSIS OF THE MINERAL PROUSTITE.

Silver,	64.67
Arsenic,	15.09
Antimony,	0.69
Sulphur,	19.51

Occurs in attached crystals, botryoidal, massive, disseminated and investing with other minerals, in veins with arsenic and ores of silver.

*Margyrite*.—Lustre Adamantine, fracture imperfect, conchoidal, opaque, blackish lead-grey, inclining to iron-black and steel-grey; in thin splinters blood-red by bevy sectile. Specific gravity 5.3 to 5.4.

## ANALYSIS OF MARGYRITE.

Silver,	36.40
Copper,	1.06
Iron,	0.62
Antimony,	39.14
Sulphur,	21.95

*Hanthocore*.—Fracture anchoidal, uneven; transparent, translucent; orange-yellow, brown, streak the same but darker. Brittle; specific gravity 5.18 to 5.191.

## ANALYSIS.

	1	2
Silver,	64.18	63.88
Iron,	0.97	—
Arsenic,	13.49	14.32
Sulphur,	21.36	21.80

The various machine shops in New York, according to a recent calculation, employ about 7,500 men, and have all the work they can do.

## MINING PREMIUMS.

The "Washoe Agricultural, Mining and Mechanical Society," will present at their first Annual Fair, which is to take place, on the second Monday (12th.) of October, among their largest awards, the following important Mining Premiums:—

CLASS 13.—For the best geological cabinet, best collection of ores, best exhibit of gold specimens, best exhibit of coarse gold, best exhibit of scale gold, best exhibit of flour gold, best exhibit of copper ore, best exhibit of iron ore, best exhibit of galena ore, best exhibit of cinnabar ore, best exhibit of coal, best exhibit of salt, best exhibit of alum, best exhibit of gypsum, best exhibit of petrification, best exhibit of lead, best brick of silver bullion, best specimen of cast steel, best specimen of malleable iron, best specimen of rolled shafting.

CLASS 15.—For the best plan of tunnelling, best plan of timbering tunnels and shafts, best collection of mining implements, best steam engine for hoisting purposes, best horsepower for hoisting purposes, best derrick or whim, best dumping car or apparatus, best car track, best six tunneling shovels, best six crowbars, best six drills, best six sledges, best machine for tunneling by motive power, best quartz carrying wagon.

CLASS 16.—For the best arranged and most complete quartz-crushing mill in the Territory, 2d. best quartz-crushing mill in the Territory, 3d. best quartz-crushing mill in the Territory, best quartz-crushing machine, 2d. best quartz-crushing machine, best set of amalgamating pans, 2d. best set of amalgamating pans, best amalgamating process, 2d. best amalgamating process, best india rubber machine belting, best leather machine belting, best anti-friction journals, best self-oiling boxes for shafts, best brick machine.

## THE EMPLOYMENT OF STEAM.

The "Journal of the Franklin Institute" gives the following useful and practical ideas upon the Employment of Steam. They will be read with interest by the mechanical portion of our readers:—

HIGH STEAM.—It is well understood in the world of practical engineering, and is confirmed by correct theory, that it is much cheaper to make high steam than low steam, from the saving in fuel to produce equivalent power, the improved condition of heat convection in the boiler contents, the comparative losses by external radiation, and the resultant increase, by superheating. \* \* \* Up to a certain range of heating (550,) iron boiler-plates increase their strength, while below a certain tension, which is far within the limits of ultimate strain, a boiler is as safe from one pressure as another, in reference to the usual sources of danger from disruption and explosion, which rest so much on careful attendance. As a safety under working strain, we believe that there is little to be feared from steady pressure, even at ranges which may be called excessive, and we have slept over 180 and 200 pounds of steam, after some study of the attention of the firemen to the gauge-cocks, confident of as great safety as over one-fifth or one tenth the gauge.

SUPERHEATING.—Some positive means of giving all boiler steam the benefit of this process, should be adopted. Among all the extravagant claims of enthusiasts on this subject, which have induced a general re-action, too much has been proved as to its benefits to be lightly disregarded, up to a certain moderate range of application; and by this we mean an application more distinct and more clearly defined than the ordinary process of superheating common to boilers with chimney uptakes or steam domes. If saturated steam, by the addition of from 7 to 75 degrees of heat, will be expanded from 10 to 30 per cent., as some experiments have it, and such increment of heat can be conveniently taken from the wasted gases of combustion, there is great propriety in the application; and granting the special claim to be erroneous as to gain, if the steam can be fortified against the steam-pipe, chest, and cylinder radiations and condensations, so as to show the boiler pressure on the indicator-cards, even this result is worth the slight cost of attaining it. In most of our engines, the losses between the cylinder and boilers are formidable in their percentage of coal waste.

IMPROVED CONDUCTION.—It is urged by some authorities, and endorsed by experiment, that the use in boiler-flues of conducting-pins about 3 ins. long, projecting downward, into the heated currents, by presenting much more favorable points of heat transmission than the smooth surface of the flue-sheets, improves the evaporation. The application is simple and is justified by the conditions of furnace-flue action.

SUMMARY.—The general lesson taught by the diversified forms and operations of boilers, and the principles of their action, is, that the great majority come far short of available natural results, from imperfect design and management, and that the simpler forms are practically and theoretically to be preferred.

The largest cask in the world; that was, has had its light diminished. That of Heidelberg has now a rival in a cask recently made at Dover, England. Eight couples danced on the top. The cost of this monster cask was Two Hundred Pounds sterling.

UNION MINE, RUSS DISTRICT.—The following extract from a letter from a correspondent, at the Union Mine, Russ District, should have appeared several weeks since. Its delay has been caused by the letter having been accidentally laid. The writer had just arrived in that region to the charge of the above mentioned mine. He writes:—

"The day following I visited the Union Company's Mine (Eclipse Lode) of which I had engaged as Superintendent, and was agreeably surprised at the Champion like appearance of the same, and especially at the strong indications near the surface, of its becoming, in depth, productive. I may say that I felt a little proud, at the disappointment; when hearing of the time in which this mine has been in operation without any satisfactory results to the owners, I rather expected to have seen a lode of delicate promise, instead of being long in forming an opinion that the cause of delay of "glad tidings to the proprietors," was owing to scratching at surface, instead of developing the mine in depth. The Eclipse is a regular and well defined Lode, and has in its component parts all the prevailing characters of the most productive ledges in the State, and will, judged from present appearances and the vast amount of ground the Company claims, at no distant period, stand prominent in the Share List.

The work on this Lode is confined at present to the sinking of an incline shaft, and driving a cross cut tunnel. Both are being operated on day and night. In the incline shaft the lode is 10 feet thick, but at present, to facilitate its sinking, there is only 6 feet of it from the foot wall up being carried, most of which is so strongly impregnated with gold that I have recommended the Company to forward as many pieces for working the same in addition to our stamps, as the engine is capable of driving. The remainder of the lode is at present more adapted for silver and from the upper part is by no means difficult to break blocks of mineral of 500 lbs. weight, much resembling in appearance the Sheba. After a little further sinking in the shaft, we shall commence driving tunnels each way, on the course of the lode, sinking in a mean time. A cross-cut tunnel is now being run to intersect the lode at a depth of 300 feet under a portion of a vein, where, for a considerable distance, the croppings are remarkably well, and show much gold."

The writer of the above speaks encouragingly of the mine generally in that region, as well as the Owen's River and project.

LEARN TO FORCE YOUR OWN TOOLS.—Many mechanics, says the *Scientific American*, have an idea that after they have mastered the more legitimate duties of the workshop, they have learned all that is necessary, and can undertake anything in their line of business. Machinists particularly are prone to this error—a common one, by the way—I think that a knowledge of fitting and turning, once acquired, makes up for all other deficiencies. In reality, the self-styled finished mechanic is, paradoxically, the unfinished one; he who acknowledges his short comings, and tries to correct them by obtaining all the information he can, will acquire more thorough knowledge of his profession. Comparatively few machinists are competent to dress their own tools, and indeed, handle the blacksmith's hammer on any work. In many times such knowledge would have been invaluable to leave individuals to decide from their own experience. A simple weld which they were unable to make, a faulty dressing chisels without putting their own eyes in danger, striking the anvil instead of the tool, would assuredly be understood persons ignorant of such details in good service at a time of need. Apprentices who go to the tool-dresser to have the edges of their chisels or other instruments rendered, will do well to observe the process and inform themselves of it, instead of throwing coal at the helpers or otherwise conducting themselves in an unseemly manner. Observation and experience are twins and inseparable, and no youth or indeed any adult can hope to attain eminence or proficiency without paying some respect to the matters he is alluded to.

It is said that tobacco smoke blown into a wound is almost infallible cure for the lock-jaw.

GRAVITATION has been beautifully defined as the outspread hand of God forcing all things into their place and keeping them there.



**WILLIAM BRODIE & CO.,**  
**CALIFORNIA FOUNDRY,**  
Fremont Street, near Market, San Francisco.

**Light and Heavy Castings,**  
Every Description, Made to Order. Particular attention paid to all kinds of House Work, Plumb and Ornamental.  
Jy 13

**ASSAYS!**  
**Promptness and Accuracy Secured**  
By the Use of the Most Improved  
METHODS OF  
**ANALYSIS!**

**Advantageous Terms for Prospector's Clubs**  
and Mining Companies.

**J. H. CHURCHILL, M. A.,**  
(FROM EUROPE.)  
In 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. Jy 6

**BAUNCHEIDTISM,**  
THE PRESERVER AND PRODUCER OF LIFE.

THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF curing disease, is a "fait accompli" in medicine, needs no more proof. The public has crowned Bauncheidtism already with an extraordinary patronage, and acknowledged by all men of science that Bauncheidtism is founded on a rational, scientific basis. It can safely, and with sure success be applied to patients in consequence of Apoplexy, Polagra and Rheumatism of every description, which kind of complaints find their only relief by the above method. Especially can it be applied successfully, in the spring of the year to diseases of the eye.  
Dr. Borchers is the only doctor in California who has the original series of Dr. Bauncheidt's and his original Dr. Borchers is also in possession of original letters the inventor of the method by which he can prove to be the perfect master of the latter.  
DR. J. C. BORCHERS.  
No. 19 Kearney street, and No. 4, Mark's Place, First  
Ave., No. 5. Office hours from 9 to 11 A. M., and 1 to  
and 7 to 9 P. M. Jy 21

**I. C. E. KLEPZIG & CO.,**  
**GUN MAKERS,**  
...AND...  
**DEALERS IN GUN MATERIALS,**  
3 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Ekland. Jy 21

**Giffards Injectors,**  
FOR SUPPLYING BOILERS WITH FEED WATER  
without Pumps No Mill or Mining Company  
could be without one of these valuable instruments.  
Send for a Circular.  
DAVID STODDART, Agent.  
22 Cor. Pine and Front Sts., San Francisco.

**PATRONIZE**  
**HOME MANUFACTURIES!!!**  
**James Longshore,**  
**Trunk and Valise Manufacturer,**  
27 Sansome Street, under Tehama House. Trunks and  
Cases, Wholesale and Retail, Fine Sole Leather Trunks,  
Cases, and a fine assortment of LADIES' TRUNKS constantly  
on hand. Trunks covered and repaired.  
Jy 2

**New Style of Ladies' Buckle!**  
**W. BOHM,**  
INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.  
The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It sells all other buckles in

**Usefulness, Strength and Appearance.**  
The Public is respectfully invited to call and examine the Buckle at the Jewelry Establishment of  
BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.  
Every Buckle sold, stamped "W. Bohm," will be warranted as to its Strength and Durability.  
Jy 27 W. BOHM, Patentee.

**THE**  
**BRYAN BATTERY.**

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

**ALONE STANDING THE TEST.**

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

**METHOD OF CRUSHING ORE.**

The BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

**EXCLUSIVELY ADOPTED**

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

**EFFECTIVE, SUBSTANTIAL AND RELIABLE.**

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any place of mining machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

**BOTH WET AND DRY CRUSHING,**

and are warranted to reduce, with the same weight of Stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill


As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1860, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed being cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellis & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

**MANUFACTURED ONLY BY**  
**GODDARD & CO.,**  
**At the Pacific Iron Works.**  
**SAN FRANCISCO.**  
on 125 to 136 First street, and 126 to 144  
Fremont street.

**John R. Sims,**  
  
Oregon street, between Washington and Davis and Front  
and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and**  
Shutters, Bulk Vaults, Grating, Cemetery Railings. All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

**Mr. Sims Appreciates the Past**  
liberal patronage of his friends, and trusts that he may continue to merit it in the future.

**For the Information of Strangers**  
he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this State, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attests. A large assortment of second hand shutters for sale at low rates. apl3

**LEANDER RANSOM,**  
**Civil Engineer**  
**AND**  
**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

**ALSO**  
**STATE LOCATING AGENT.**

And as such having the sale of  
**600,000 ACRES OF STATE SCHOOL**  
**LANDS,**

**At the low price of \$1.25 per Acre.**

Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oc7-3m

**D. NORCROSS,**  
**Masonic Temple, No. 6, Post Street.**  
**Military Goods of all Descriptions.**  
**Navy Trimmings and Embroideries.**  
**REGALIA FOR ALL ORDERS.**  
aug 17

**E. C. DAKE,**  
**DEALER IN**  
**CLOTHING,**  
**AND**  
**Gentlemen's Furnishing Goods;**  
**ALSO**  
**HATS, CAPS, ETC.**

**AT THE NEW YORK CLOTHING STORE,**  
**541 & 543 Washington at Montg'my Bk**  
jc] Old No. 145. [29

**FOR SALE.**  
**PATENT PRESSED RUSSIA IRON MINING PANS.**  
Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the  
**UNEQUALLED**  
**MONITOR COOKING STOVE**  
**OR**  
**RANGE,**  
**FOR HOTELS.**  
To which we call particular attention.  
jc-29 TAY, BROOKS & BACKUS.

**TREATMENT OF AURIFEROUS AND ARGENTIFEROUS COPPER ORES.**—An improved mode of manufacturing copper from ores has been provisionally specified by Dr. T. Fleitman, of of Iserlohn, Prussia, according to which the copper ores are first ground to powder; then one part of such powder is roasted dead, and mixed with the unroasted portion, and the whole is smelted with a suitable flux, such as silica or the slag of a previous process. The smelted mass is run into water, and the product ground to powder: and the process repeated until the resulting sulphuret of copper is in the desired condition. The sulphuret of copper obtained is ground to powder and roasted dead, then moistened with an alkaline solution. The oxide of copper is subjected to heat to melt the alkali, but not the oxide copper, which is then well washed in water: the product obtained is mixed with powdered carbon, and then melted.

**NEW SALT MINES.**—The bark Carib has lately discharged a cargo of salt at this port, from the mine known as Oje de Liebre, at the head of Scammon's Lagoon on the Pacific side of the Paninsula, Lower California, lying in latitude 28 degrees 10 minutes, and 114 degrees 50 minutes longitude. This mine is of great extent, and inexhaustible. The beds from which the salt is taken are ten inches to five feet in thickness, and continually forming.

**MORE GOLD IN CANADA.**—We hear from Canada of the finding of an abundance of gold on the tributaries of the River Chaudiere, about fifty miles above Quebec. One nugget weighing 20 ounces of pure gold was picked up in the bed of one of these streams. Another, weighing nine ounces, found near the same place, was sold in Quebec. The news has of course created a great excitement, and people are flocking in crowds to the spot.

**UNION**  
**IRON AND BRASS FOUNDRY.**  
**The First Established in the State.)**  
CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO

**HAVING ADDED TO THE SEVERAL**  
Departments all the recently improved Tools, this Establishment is now the most Extensive and Complete of any on the Pacific Coast.  
The undersigned are prepared to furnish, at short notice, Locomotive, Marine and Stationary Engines, of every size and description.

**BOILERS.**  
Locomotive, Flue, Tubular, Upright and Cylinder, furnished with or without engines, complete.  
Machinery and Castings of every description, Saw-mills, Grist Mills, Car Wheels, Derrick Irons, etc.

**QUARTZ CRUSHING BATTERIES**  
Embracing a great variety of Stamp, Mortar and Cam Patterns.

**AMALGAMATING MACHINERY,**  
Varney's Improved Patent Pans and Settlers, Wakely Pans, Amalgamating Tubs, Plaisied's Grinders, Chile Mills, Concentrators, etc., etc.

**MINING PUMPS.**  
Cornish, Lift and Force Pumps, from four to eight feet stroke, with Pipes, Bob Mountings, and Gearing complete.

**HOISTING DRUMS.**  
For Shafts or Inclines, with clutch, friction or V cones. Sole Agents and Manufacturers for the Pacific Coast, of C. and G. M. Woodward's Celebrated Patent Safety Steam Pumps and Fire Engines.

All Contracts and Orders executed with promptness and dispatch, and at reduced prices for Cash.  
jc21 DONAHUE, BOOTH, & CO.  
**Washoe Correspondence.**

**A. C. MORSE,**  
**Mining and Real Estate Agent,**  
Office—S. W. corner Pine and Silver sts., Aurora.  
**HAVING MADE ARRANGEMENTS**  
with MINER S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco. I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District.  
P. DONAHUE. H. J. BOOTH. C. S. HIGGINS



## NON-DIVIDEND PAYING MINES VALUABLE.

The list of companies which we gave, in our Supplement exhibits a degree of activity in mining matters, never witnessed before, either in California or any other country. We notice, on the part of many of our contemporaries, a disposition to look upon this remarkable movement of organized capital as a matter of almost entire speculation. It is admitted that the stock of a few of the leading companies like those located upon the Comstock ledge, is valuable; but that outside of those, there is little else than "wild-cat." "Wild-cat speculation" is said to be the chief business of those engaged in getting up these companies, and nine tenths of the mining stock in the market, is pronounced "good for nothing except to excite the hopes of simpletons and thereby rob them of their money."

That there is a moiety of truth in the above may be correct, but we are not willing to admit that there is any adequate ground, whatever, for the sweeping charges which are so frequently brought against those engaged in the general mining operations of the day.

With many, all low-price stocks are looked upon as "wild-cat;" but with that definition of the term, there can be no medium between "wild-cat" and legitimate, dividend paying mines. All mines, with now and then a notable exception, must go through a process of development to ascertain their full value. There are certain indications upon or near the surface of every mine, well known to the experienced miner, upon which deductions of a favorable or an unfavorable nature can intelligently be made; and upon these the miner must determine his course of procedure. As the work of development progresses, these indications are more or less favorable; and of course the price of any particular stock meets with corresponding fluctuations, until such a time as the mine is fully developed, and becomes a regular, dividend paying institution. The price of stock is thereafter graduated by the amount of dividends which it can be made to pay.

The fact that thousands of mining companies are being organized at the present time, is simply an evidence that there are that number of promising lodes of mineral in the country which are worth prospecting. Any person who has kept himself posted in mining intelligence for the past few months, must be aware that within that time, an almost limitless extent of valuable mining territory has been opened up to explorers, throughout the entire extent of which mineral croppings and indications of most undoubted value have been found. When a vein is once discovered, it is usually found to traverse an extent of ground upon which from four or five to a dozen or more companies may be eligibly located. From forty-five to fifty companies have undoubtedly locations on the Comstock vein, besides a large additional number who claim such a location, but which may eventually prove to be upon side veins or spurs. The marvel is, under the circumstances, that there are not more, rather than less companies now organized. The plan now so generally adopted for prospecting and developing the mines is perfectly legitimate and equally as advantageous to the capitalist as to the miner. Ordinary precaution, only, is needed to guard reasonably against "wild-cat" operations.

A most erroneous opinion appears to be entertained, with regard to the value of non-dividend paying mines. The impression appears to be that if a mine, after a small expenditure for development, does not pay a dividend upon some fictitious value which its locators have seen fit to place upon it, the same must be abandoned as worthless. Of course the original stockholders in such an adventure are losers; but if they can secure one first class mine out of a dozen ventures, the successful one affords ample remuneration for the failure of the eleven. But even the eleven are not lost to the community or State. According to the usual average of mining chances it is safe to calculate that at least five of the eleven will pay the costs of working, after they have been opened at the expense of the twelfth; and by a wise provision of all our local mining laws, if a mine is abandoned by its original locators, for a certain specified time, any other person, who may choose to do so, can come in and work it—so there is no probability of any mine lying idle which will pay its mere working expenses.

A mining community may grow up and flourish, even, in a neighborhood which does not possess a single dividend paying mine. To illustrate, we will take one of the princi-

pal mines in Washoe:—The Ophir, in order to pay its present dividend of \$48 per foot, must yield \$140,000 per month about one half of which, or \$70,000, goes to pay expenses. Now it is quite evident, on a little reflection, that two mines, each employing the same number of men as the Ophir, but which are so poor as to barely pay the expense of working, are collectively worth more to the State in an industrial point of view, than the fabulously rich Ophir itself. Why? Because the two mines yield not only the same amount of bullion with the Ophir, but they also give employment to twice the number of men, at the mine; twice the number of foundrymen and machinists are employed to keep their works in repair and they draw twice the amount of supplies from San Francisco, that the Ophir does. Hence two "wild-cat" mines, whose stock may not be worth \$5 per share on Montgomery street may be actually of more value to the State and city than the famous Ophir which is valued to-day at \$2,500 per share! It is a fact, which to be known, needs only to be enquired into, that not one quarter of the mines in the State, whether placer or quartz, incorporated or private companies, have ever paid a dollar over and above a fair rate of wages to those employed upon them; and yet, the State has continued steadily to increase in wealth and population. San Francisco has maintained a steady, onward progress, values have been created all over the State, millions of treasure have continued to go East, each month, and California has come to be regarded as the mineral wonder of the world. The fact is, so long as our mines are free to the people and will merely continue to pay wages, just so long will California grow and prosper and San Francisco continue her onward progress.

We apprehend this is a view of our mining interest which is seldom taken; yet it is legitimate and correct, and furnishes a most convincing argument against the senseless tirades of the croakers who are continually prophesying bankruptcy and ruin as the result of the present "mania," as they term it, in mining operations. The fact is, mining has but just been commenced. The immensity of our mineral developments is fairly overstepping both our population and capital.

Everything was just upon the point of ruin three years ago because they were paying \$1,000 for the Ophir, \$400 for the Gould & Curry, \$50 for Chollar, and less even for Hale & Norcross, Potosi, etc.; while, as for such "wild-cat" mines as the Yellow Jacket, Best & Belcher, and a score of other mines of acknowledged present value, they were mere schemes "to excite the hopes of simpletons and thereby rob them of their money." The croakers of those days now wish they had been "simpletons" then. Let the croakers of to-day learn wisdom from the past.

**THE NELSON COPPER MINE.**—The proprietors of this mine, which is located about six miles above Lincoln, on the Nevada road, are making preparations for vigorous work in the way of its thorough development. A contract has been completed with a party for a quarter interest in the mine, to put up a 20-horse power engine with the necessary pumping and hoisting apparatus. The claim consists of 2,000 feet. The usual croppings of carbonates are found upon the surface, and considerable native copper occurs at a depth of about 27 feet. A shaft has been sunk to the depth of 70 feet, with most promising indications.

**THE NEWTON MINE.**—This mine is now raising a large amount of very superior quality of ore. Of the 600 tons of ore which went forward by the Mary L. Sutton, this day week, as noticed in our last issue, 200 tons were from this mine, though not reported at the time. This mine has been shipping about 100 tons of ore per month for the past seven months. But little is said about it, from the fact that it is conducted by a private company, who are satisfied with doing business in a quiet way. It is one of the most valuable mines in the State, and we are pleased to notice the progress of its development, as additional evidence of the increasing value of our Copper interest.

**LECTURE.**—Dr. Bourne, a well known citizen, gives a free Lecture, every Friday Evening, at Dashaway Hall. Our contemporaries speak favorably of these Lectures. They are pronounced both interesting and instructive by those who have heard them.

## THE NEW SOUTHERN MINES.

Most extraordinary reports continue to reach us from the new mines in the San Francisco Mountains. These mines are located on the Agua Frio river, about 300 miles in an Easterly direction from San Diego. They have already been prospected for an extent of 150 miles, throughout which extent, it is said gold is found everywhere. There is sufficient water for domestic purposes and for stock, and for mining with rockers only, but not for sluicing or even for a tom. This is the report of prospectors who have recently gone over the country. Of course, when the rains set in the water will be more abundant. The climate is represented as being unsurpassed. Plenty of grass and timber; valleys luxuriant, water in them to be found almost everywhere by digging a few feet.

## THE MINING SHARE MARKET.

A fair degree of interest has been manifested in Mining Matters during the past week. The "Mining Roll" has materially lengthened, and about the usual number of "Organizations," have been completely according to the requirements of the Incorporation Act. During the week we have published a list of 969 Incorporated Mining Companies, who have their places of business in this city. Were the list complete it would, in all probability, exceed 1200.

An important feature of the week has been the sale of the New Almaden Quick-silver Mining Company for the round sum of \$1,750,000. Payment is to be made to-morrow. The negotiation has been conducted by telegraph. This sale will put an end to the vexatious litigation in which this mine has been so long involved, and will place beyond peradventure any further interference with the working of these mines, whose regular yield of quicksilver is of the utmost importance to the entire mining interest of the State.

Ophir Shares opened at \$2,425. The sales of the week reached 288 shares, at rates fluctuating between \$2,425 @ \$2,525, and closing at \$2,420. The fluctuation has been owing to the uncertainty with regard to the approaching dividend—operators being in doubt as to whether the Company, after failing to declare a dividend for last month, will be able to increase their dividend for the present month to their former standard of \$72 per foot.

Gould & Curry shares have declined considerably during the week. Twelve shares only have changed hands since our last report at \$4,750 @ \$4,775. A dividend of \$150 per foot was declared on Wednesday. At the close of the week these shares were offered at \$4,550 without takers.

No transactions are reported in either Chollar or Hale & Norcross.

Potosi shares have declined about \$75 dollars from last week's quotations and are now quoted at \$900 @ \$950. They have been considerably sought after at \$950 on 30 days, but cash is demanded.

Sierra Nevada have not been so much sought after as last week. They have declined somewhat with light transactions. They are quoted at \$93 @ \$100.

Daney shares have been largely dealt in at rates greatly fluctuating. Sales of 1140 shares are reported at \$100 @ \$144. [The week previous 597 at \$105 @ 150.] These transactions have been produced by variable reports from the mine, which is flooded. Much uncertainty exists as to the amount which will be required to put it in good condition again, which sum must be raised by assessments.

Buckeye has not attracted so much attention as for the two previous weeks. Sales of 283 shares at \$34 to \$40, closing at a slight advance on last week.

Burning Moscow is again attracting attention, at considerable advance. Sales of 202 shares are reported at \$80 @ \$108½. It closed the week with a firm market, at \$105—\$20 improvement on dull sales of the previous week.

Savage. Transactions in this stock still continue light, and at declining rates. Sales of seven shares are reported at \$3,300. This Company has just declared its first dividend (payable to-day) of \$50 per foot. It is understood that a balance of \$35,000 is retained for the purchase of winter supplies. \$80 per foot is confidently expected hereafter.

Overman, for which \$510 was bid at the close of the previous week without finding sellers, found buyers at \$650, early the past week, after which it declined to \$465, closing at \$475. \$85 better than the lowest bid of the week previous. Seventy-two shares have changed hands during the week.



Yellow Jacket has been dealt in to some extent; 34 shares having changed hands at \$1,050 @ \$1,125.

North American still continues in favor, with large sales. 39 shares have changed hands at \$58 @ 75, closing at \$58. We reported the previous week's sales, 418 shares from \$50 @ \$67.

Baltimore American has been largely dealt in at remarkably fluctuating rates. Sales of 807 shares are reported at \$110 @ \$110. These shares opened at \$80, advanced to \$110 on Tuesday, fell to \$45 on Wednesday, then recovered to \$57½ and finally closed the week at \$50 with a weak market.

We notice further sales as follows:

	White and Murphy	10 shares	\$700	per foot.
Best & Belcher	4	"	950	"
Jurisd.	60	"	5 @ 5½	"
Adriatic	20	"	3¾	"
El Dorado	68	"	75 @ 90	"
Madison	60	"	17 @ 19	"
Pride of the West	45	"	85 @ 92½	"
Bullion, Gold Hill	110	"	69 @ 70	"
Lucerne	123	"	22 @ 26	"
Lady Bryan	132	"	12 @ 13	"
Chas Cany	24	"	25 @ 25	"
Grass Valley	181	"	80 @ 105	"
Melones	31	"	122½ @ 128	"
Uncle Sam, Gold Hill	30	"	80 @ 85	"
Leon, Gold Hill	25	"	25	"
Sierra, Gold Hill	25	"	30	"
Union, Gold Hill	20	"	30	"
Union, Russ District	210	"	2½	"
Spanish, No. 2	65	"	40 @ 45	"
Newsome	10	"	5	"
Beho, Gold Hill	12	"	60	"
Caledonia Tunnel Co.	20	"	46	"
Blue Ledge	75	"	10 @ 11	"
Lady Adams, R. River	5	"	11	"
Evangeline	10	"	10	"
Mina Prieta, Mexico	5	"	212½	"
Great Western Tunnel	25	"	3	"
Sheba	29	"	160 @ 170	"

Esmeralda stocks still remain comparatively quiet and are but little enquired after.

Wide West is dull at \$132½; Silver Hill at \$27. Ural has met with light sales at \$210.

Real del Monte has found buyers at \$375, at which figure 25 shares have changed hands.

Pond has been considerably dealt in, the past week; 201 shares have changed hands at from \$25 @ \$35.

We quote further sales as follows:

Wide West	114	"	132 @ 146	"
Silver Hill	25	"	26 @ 27	"
Ural	5	"	210	"
Nevada	20	"	18	"
Falls of Clyde	98	"	4½ @ 5½	"
Josephine	23	"	12 @ 12½	"
Willow Springs	10	"	7	"

#### COPPER.

There is no apparent abatement in the Copper interest. New mines are constantly coming into notice, and the regular shipment from established mines is constantly increasing.

The Newton mine, from which little has been heard of late, still continues its regular shipment of ores at the rate of about 100 tons per month.

The Napoleon still continues its usual shipments, which appear to be limited only by the facilities for transporting the ore from the mine to steam navigation at Stockton. The daily reports from the mining Superintendent are most encouraging. The lode is constantly improving. Two immense blocks of ore have been blasted out and raised from the main shaft, within a few days past, which will be placed on exhibition at the approaching fair at Stockton.

The Keystone is working a large force, and concentrating the lower grades of ore. Shares in this Company are held at \$170 per foot in Stockton, with \$150 offered.

Much interest is felt in the success of the concentrating machinery which is being put up by this company. Its success will add largely to the value of the copper interest, not only at Copperopolis, but also in all other parts of the State.

The Camp and McNulty Copper Company and Hughes claim are said to be progressing well.

The Josephine Company, is about contracting for 75 feet

of tunneling, which it is believed will bring them to the Napoleon lode.

There is a large amount of prospecting being done in the vicinity of Copperopolis, with most flattering indications of success.

The Campo Seco Mines are reported doing well and before the season closes it is thought ore will be again shipped from the Lancha Plana, Lone Star and Campo Seco Companies.

The Lancha Plana Company are turning out some excellent rock. The Campo Seco Company have built a splendid water wheel on their claim for the purpose of pumping out the water and raising the ore. The Lone Star Company have struck paying ore. There are several other claims which are reported as doing well.

Fifty-five tons of ore from the Well Lead, Nevada county, arrived at Sacramento the past week, *in transitu* for the Antioch Smelting Works. This is one of the earliest copper mines opened in that section of the State, and it is expected the mine will, hereafter, be able to ship that amount weekly, which amount will be gradually increased to fully a hundred tons within a few months.

The Home Company, located, if we mistake not, in El Dorado County, made their first important shipment of 20 tons of ore to this City during the past week. This ore is to be shipped to Swansea by the Pacific Mineral Company of this City.

We have nothing of special interest from Butte or Del Norte counties.

Considerable attention is being directed to the copper mines of the Colorado. Some very valuable discoveries are reported most conveniently located for shipment down the river. A party in this city assured us, the past week, that he had assayed ore from sixteen different lode within a few days all from that region, none of which fell below twenty-five, and from that up to eighty per cent.

#### REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending Aug. 29, 1893.

Names of Companies.	Total No. Shrs.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Opbir	16,800	12	\$300	2410	2440	2400	2420	2400	2400
Gould & Curry	4,300	12	500	4700	—	4750	4600	4250	4300
California	5,600	12	300	—	—	—	—	—	—
Chollar	5,600	12	300	—	—	—	—	—	—
Potosi	2,800	12	500	900	800	900	900	920	900
Hale & Norcross	800	12	500	—	1800	—	1900	—	1800
Sierra Nevada	3,000	12	500	90	95	94	93	96	91
Daney	8,000	12	500	150	—	125	117½	112	105
Burning Moscow	4,800	12	300	75	—	80	—	82½	96
North Potosi	2,000	12	300	40	—	30	30	—	—
Rogers, F. D.	3,000	12	250	—	—	—	—	—	—
Mercedita	7,200	12	125	—	30	40	—	—	—
Charles Caney	1,800	12	30	—	—	—	16	30	21
Sacramento	1,800	12	500	—	—	—	70	—	—
Lucerne	1,800	12	500	—	—	—	—	—	—
Lady Bryan	5,000	12	100	—	—	—	—	—	—
Savage	800	12	—	3275	3000	3300	—	—	—
Towle	—	12	—	—	—	—	—	—	—
El Dorado	—	12	—	70	70	70	72½	80	75
Norton	1,600	12	3	—	3	—	3	3	3
La Crose	—	12	—	—	—	—	—	—	—
Moss	—	12	—	—	—	—	—	—	—
Porter	—	12	—	—	—	—	—	—	—
Burnside	—	12	—	5	5	4	4	4½	5
Adriatic	—	12	—	3½	4	—	3½	3	4
Brennus	—	12	—	—	—	—	—	—	—
Cedar Hill Tunnel	10,000	1	100	2½	2½	2½	2½	2½	2½
Mount Davidson	10,000	1	200	2	—	—	—	—	—
Pride of the West	—	1	—	91	85	75	70	70	70
G. H. Quarz M. Co.	—	1	—	—	—	—	—	—	—
Imperial	—	1	—	—	—	—	—	—	—
<b>CALIFORNIA STOCKS.</b>									
Wide West	2,000	1	600	146	140	133	136	135	134
Antelope	1,200	1	500	—	150	170	—	160	150
Esmeralda	1,600	1	1000	27	25	28	—	25	30
Real del Monte	4,400	1	400	—	—	—	—	—	—
Etina	1,200	1	700	—	—	—	—	—	—
Utah	1,800	1	250	55	50	54	—	—	—
Silver Hill	3,000	1	500	—	25	26	26	25	26
Nevada	1,200	1	250	—	—	—	10	—	—
Federal Hope	—	1	—	—	—	—	—	—	—
South Utah	—	1	—	—	—	—	—	—	—
Jenny Lind	—	1	—	—	—	—	—	—	—
Falls of Clyde	—	1	—	2½	4	4½	5	5	4½
Sunbeam, s. w. ex.	—	1	—	—	—	—	—	—	—
Bamboo	600	1	500	25	20	—	—	—	—
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	11	11	8	7	—	8
Coso	3,600	1	600	6	4½	6½	5	5	4
Willow Springs	2,700	1	100	7	—	6½	6	—	5
Empire	—	1	—	—	—	—	—	—	—
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	—	1000	—	—	—	—	—	—
Dona Pats	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	800	60	55	60	—	—	—
Josephine	—	1	—	—	—	—	—	—	—
<b>CALIFORNIA STOCKS.</b>									
Farwell Hill	—	1	—	2½	—	—	—	2½	—
Utica	—	1	—	—	—	—	—	—	—
Rhodes Diggings	—	1	—	—	—	—	—	—	—

#### ESMERALDA STOCK LIST.

(Corrected for the Mining and Scientific Press, Aug. 26, 1893.)

	Bid.	Asked		Bid.	Asked
Alpine	\$4	10	Lilly Dale	10	35
Amador	—	5	Live Yankee	9	20
Atlantic	2	—	Lord Byron	7	18
Arcade	—	—	La Plata	8	12
Antelope	375	—	Mesa Esmeralda	26	30
Atina	10	15	Mesa Esmeralda	10	10
Brazo	3	6	McKinstry Tunnel Co.	3½	10
Bodie Road Consolidation	9	10	Monte Christo, Tunnel co.	—	—
Bodie Peak, Bodie Dist. net	—	—	Mutual	—	—
Bright Star	10	15	Mount Braley	3	3
Bamboo	—	—	Mary L. Gardner	—	—
Bonanza (Van Horn Dist.)	3½	10	Mina Real	—	—
Bodie Bluff, No. 1	8	10	Mercedita	—	—
Bodie Bluff, No. 2	16	16	North Willow Springs	—	—
Bunker Hill	6½	10	New Esmeralda Consol.	2	5
Bonaparte, Tunnel comp.	—	—	Newton	—	—
Cane Hill	—	—	Nevada, (Tunnel)	—	1000
Climax	11	11	Ozark	—	—
Crockett	150	200	Old Winnemucca	10	10
Cape	—	—	Paul Tunnel Co.	5	10
Clan Alpine	—	—	Pond	25	40
Davis, consolidation	—	—	Pride of Antelope	—	5
Durbin	9	9	Peru (two ft. to the share)	8	10
Del Norte	15	15	Pennsylvania Tunnel Co.	7	10
East Essex Ex. Ural	10	10	Real del Monte	410	460
Excelsior, Excelsior Dist.	—	—	Rebecca	—	—
General Hawk (Con.)	25	30	Red White & Blue	—	—
General Jackson	13½	14	Stanford Tunnel Co.	—	—
Garibaldi	—	—	Schenectady	—	—
Golden Harvest	—	5	Strawberry	20	—
Golden Cross	20	25	Silver Hill	60	—
Governor Seymour	—	—	Silver Hill, Bodie District	—	—
Golden Age	25	25	Seymour	—	—
Great Britain	—	—	St. George	10	—
"Golden Era" Tunnel Co.	—	—	Tasca	—	—
Greenback	—	—	Tiger	3	—
Hanover	12	25	Tucker	—	—
Howard Tunnel Co.	1	8	Tennessee	—	—
Heath	5	12	Union Tunnel	10	30
Herman Consul	15	15	Ural	120	—
Home Check, Excelsior Dis.	5	5	Ural proper	165	165
Junista	—	—	Ural (extension)	5	10
Keeney	—	—	William Tell	—	—
			Wide West	140	160
			Washington, Tunnel comp.	—	—
			Western Summit	—	—
			X-Eliza and Constantinople	—	—
			consolidated	1½	5
			Yancey	—	—
			Cortez, consolidated	—	—

#### SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

CAUTION.—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.



**THE COLORADO RIVER TRADE.**—Gentlemen recently from the Colorado state that business along that river is brisk, in consequence of the extensive mining operations going on in that region. Three steamers are now plying on the river and another is in process of construction. The channel of the river is being sounded, with a view to putting on a still larger line of boats. Vessels clear from this port for the mouth of the Colorado, where they discharge their cargoes into the steamers, which transport them thence up the river to the mines. It is anticipated that there will soon be shipped hither full cargoes of copper ore from this rich, yet comparatively undeveloped region.

**THE "Los Angeles Consolidated, Copper Gold and Silver Mining Co.,"** located in the Soledad Mining District, was incorporated on the 28th of January last, and have been working since the 3d of February, on the "Miller" Copper Lode, with following results. This Company has also commenced running a tunnel on the Spence Native Copper Lode, on which they have attained a depth of 80 feet. But little of the stock has been offered in this market, publicly, although a considerable amount has changed hands at from \$7 @ \$10 per foot.

**TREASURE FROM THE NORTH.**—The Seirra Nevada arrived from Victoria on Thursday last, bringing down the handsome sum of \$440,355, in treasure.

This dust is mostly from the Bannock mines, in Idaho. This arrival also speaks of a large yield of about thirty claims at Cariboo, which is reputed as averaging about \$1,600 each per month.

**THE OPHIR MINE.**—The Virginia City Union of 20th August, says:

The new and rich vein struck in the Ophir a few weeks since continues to hold out well, a large amount of ore being extracted daily. It has been opened for a distance of fifty, and about twenty-five laborers are constantly engaged in still further developing it. A shaft is being sunk about fifty yards northwest of the engine house, and a new and substantial track has been laid from it to the dump pile. A vast amount of earth has already been removed by the new drifts. The "cave" still looks as if it were a lucky strike. Ore is not yet being taken from the lower mine.

## 50 lbs. MARINE and Fire-Proof Paint,

**MANUFACTURED BY THE PACIFIC METALLURGICAL** Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mixed with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

### 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

### DIRECTIONS:

**HOUSE:**—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.  
**ROOF:**—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
G. T. FOUQUE, Superintendent.

**WORKS, North Beach; Office, 509 Sacramento st., San Francisco.**

## GENERAL NOTICES.



### DR. H. AUSTIN, DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

## DESKS

Office Furniture,  
OF ALL KINDS.....FOR SALE BY

JOHN WIGMORE,

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all kinds, attended to.

## SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTURER, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,  
Opposite the What Cheer House, San Francisco.

### CHARLES GEDDES,

ARCHITECT,

Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms.  
Jy 20 San Francisco

### FREDERICK MANSELL,

MECHANICAL & ARCHITECTURAL

DRAFTSMAN,

No. 422 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

## New Patent Agency.

WE HAVE CONNECTED WITH THE  
Publication of the "MINING AND SCIENTIFIC PRESS"  
The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency**  
The most desirable place to make application for Letters Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

### FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Government House. EWER & SMITH, Solicitors.

### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

### PATENT RIGHTS.

Patent Rights Bought and Sold,  
At the office of the "Mining and Scientific Press" Agency  
EWER & SMITH.

### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their inventions illustrated and described in the columns of this paper. Free of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

## Offices To Let,

In the Government House, Corner of Washington and Sansome Streets. Two large suites of Offices, the most commodious and accessible in the city. C. A. CRANE, Proprietor

## GENERAL NOTICES.

## HAYNES & LAWTON,

IMPORTERS AND DEALERS IN

## CROCKERY,

GLASS WARE,

## FRENCH CHINA,

Coal Oil Lamps, Table Cutlery

## CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCHANT.]  
SAN FRANCISCO.

## WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. sol6-tf ZENAS WHEELER.

### Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

### REMOVAL.

**OFFICE OF THE PACIFIC METAL**  
Surgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
COPPER ORES.—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

### NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

GEO. A. METCALF.

D. S. HUTCHINSON,

METCALF & HUTCHINSON'S  
PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

**\$3. Per Dozen!**

Large sized Photographs \$3.—Extra copies \$1 each. AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.  
Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

## HOTELS.

### International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

FIRE-PROOF BRICK BUILDING.

Most convenient to the Steamer's Landing, Business sts. & Places of Amusement  
**OPEN ALL NIGHT.**

City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**

and sets as good a table as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

### Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY** advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,  
**WHICH SECURES TO OUR GUESTS QUIET.**

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL  
F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurbished the INTERNATIONAL Hotel, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

## THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.

H. T. FELTON - - - - - W. C. MINOR,  
PROPRIETORS.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

**The Rooms are handsomely furnished,** supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House **Free of Charge.**

The House is open all night.

## P. M. S. C. O.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the month of May, 1863.

Aug. 3d, - - - - - Steamer Orizaba.

Aug., 13th, - - - - - Steamer Golden Age.

Aug. 23d, - - - - - Steamer St. Louis.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.

And connect, via Panama Railroad, at Aspinwall, with teams for New York.  
For Freight or passage, apply to

A. B. FORBES, Agent.

Je4 Corner of Sacramento and Leidsdorff sts.



FOUNDRIES & MACHINE SHOPS.

**REYNOLDS' Patent Cut-Off and Governor, FOR STEAM ENGINES.**

127 of these Invaluable Machines, ARE NOW IN USE In California and Nevada Territory, giving a perfectly regular motion and Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor**

Is the CHEAPEST, SIMPLEST and QUICKEST to set and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

**Clark's Steam and Fire Regulator,**

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

**Ingersoll's Patent Drill Press,**

With which drilling can be done the same as with the common racket, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

**Felt for Steam Boilers, Pipes, Etc.**

At the lowest market rates.

**Steam Engines, Boilers, Pipes,**

Hydraulic Presses, Shuffling, Pulleys, Etc., at the lowest market rates.

**Anti Incrustation Powder,**

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years. Refer to—Sugar Refinery, San Francisco, Cottrell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States. E. T. STEEN AGENT. No. 33 Fremont Street, San Francisco.

**EXCELSIOR IRON WORKS,**

713 Sansome street, Between Jackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,**

Manufacturers of all kinds of

Architectural and Ornamental Iron Work, Bank and Store Vaults, Safes, Doors, Shutters, Balcony, Area and Cemetery Railings, Gates, Stairs, Etc., and all kinds of Blacksmithing and Jobbing done with promptness, and at

Reasonable Prices.

Orders from the country promptly attended to. je13

**FULTON FOUNDRY & IRON WORKS**

**HINCKLEY & CO.,**

MANUFACTURERS OF

**Steam Engines**

QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC.,

**FIRST STREET,**

BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*All kinds of IRON and BRASS CASTINGS furnished at short notice. Every style of FINISHING to iron when cast. Repairing of Machinery neatly done. PATTERNS MAKING in all its various forms. Prices low: D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**MOYNIHAN & AITKEN,**

**Boiler Makers and Blacksmiths,**

Mission, between Beal & Fremont Sts, San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms. jy 29

**PUMPS!**

**HARRISON'S**

**California Lift and Force Pump,**

WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

**ALL SIZES;**

Capable of throwing from ONE HUNDRED to FIVE THOUSAND Gallons per Minute—For sale by

**C. H. HARRISON,**

PHOENIX OIL WORKS,

je-15 517 Front Street, San Francisco,

FOUNDRIES & MACHINE SHOPS.

**PALMER, HANSCOM & CO.,**

**GOLDEN STATE IRON WORKS,**

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

**To Quartz Miners.**

Knox's Improved AMALGAMATING PAN, WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known. By its use is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be other wise lost. Made exclusively by PALMER, HANSCOMB & CO., GOLDEN STATE IRON WORKS, Nos. 19 & 21 First Street, San Francisco

The public are informed that Lotter's Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. W. A. PALMER.

JOHN P. GALLAGHER.....JOSEPH H. WEED.

GALLAGHER & WEED,

**BRASS & BELL FOUNDRY**

AND

**LOCK FACTORY.**

No. 125 First Street, opposite Minna, next door to Pacific Foundry, all kinds of

Brass and Composition Castings and Finishing, done with neatness and dispatch.

CHURCH and STEAMBOAT BELLS, OF ALL SIZES Made to order. Engineer's Gongs made and hung in the best manner. Bank, Vault, Store and Prison Locks, also brass Padlocks and Shop Locks of various patterns, on hand and made to order.

Particular attention given to casting Rudder Braces and Ship Work in general.

All Jobs promptly attended to.—Prices moderate.

Removed from Oregon street, between Front and Davis.

**Miners' Foundry**

—AND—

**MACHINE WORKS,**

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON and BRASS MACHINERY, the Best and Most Economical, manufactured in the State of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as: Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\*Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING

San Francisco, February 23, 1863.

**San Francisco Machine**

....AND....

**IRON WORKS!**

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON most reasonable terms.

Steam Engines, High and Low Pressure; Quartz mills, Saw mills, Mining Pumps, Hoisting machines for mining purposes, Wine Presses, Agricultural implements etc, etc, and Castings of all descriptions made to order Steam Engines exchanged and for sale by DEVORE, DINSMORE & CO.

REPAIRING promptly attended to.

**FOR SALE.**

One Upright Post Drill, Putnam's manufacture. Also one thirty-inch screw Chuck. San Francisco, July, 1863. je13

FOUNDRIES & MACHINE SHOPS.

**VULCAN IRON WORKS COMPANY**

P. Torquet, Manager,

**STEAM ENGINE BUILDERS**

and

**BOILER MAKERS,**

Iron Founders and General Engineers,

No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing Machinery.

Shoes and Dies of the hardest iron,

Russia iron Punched Screens.

Steamboat Machinery: Saw, Flour and Sugar Mills.

High and Low Pressure Boilers of all Styles.

JONVAL and other Turbine Water Wheels with latest improvements.

**W. T. & J. GARRATT,**

**City Brass and Bell Founders**

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS OF ALL SIZES. Manufacturers of "Garratt's Patent Improved Journal Metal."

**D. MORRIS, MACHINE SHOP,**

227 Market, corner of Beale Street.

Manufacturer of

**WARRANTED FIRE-PROOF SAFES**

Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. je13

**LEWIS COFFEY AND RISDON,**

**STEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

**THEODOR KALLENBERG**

**Maker of Models**

**FOR INVENTORS.**

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.

No. 418 Market street, San Francisco. at 3m

**HIRAM WRIGHT,**

**PICK MAKER,**

Has established a Manufactory for the Making of

**MINER'S PICKS,**

at

NO. 121 POST STREET, SAN FRANCISCO,

[Between Montgomery and Sansome.]

WHERE can be had a superior Pick for Miners use As he manufactures all his picks under his own personal supervision, he warrants them as being made of the best material and by the best workmanship.

Orders attended to and filled promptly and with dispatch. aug17

**WRIGHT'S PICKS.**

JOHN WRIGHT, of Sacramento, has established himself in San Francisco, for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

**CALIFORNIA TOOL WORKS!**

**John Weichhart,**

Manufacturer of

**All Kinds of Edge Tools, Etc.,**

Plane Irons

Moulding Irons,

Stone Cutter's Tools, etc. No. 22 Fremont street, bet Market and Mission, San Francisco, July 14, 1863. jy 20

How SOLDIERS DESTROY RAIL-ROADS.—A letter from Gen. Grant's army to *The Springfield (Ill) Journal*, describing the recent operations of our forces near Jackson, says:

Our operations on the railroad were of a novel character.

The regiment would be formed into line on one side of the track, and at the command every man would take hold on the end of a tie or a rail, and, straightening up, would lift the track from its bed, completely capsizing it. Then, piling the ties together and setting them on fire, we laid the rails across rendering them unfit for future use."

**Eye, Ear and Throat.**

**DR. DE CASTRO,**

Oculist and Aurist,

**WHO HAS PRACTISED IN NEW**

York and all the principal cities of Europe with such unrivalled success, and from each place in possession of the most eminent testimonials, may now be consulted upon diseases of these delicate organs, with a view to their permanent cure. Deafness of long standing thoroughly cured. The Doctor employs his (by the Medical Society of London approved)

**Self-adjusting Artificial Tympanum,**

For the relief of deafness, attended by loss or injury of the membrana tympani, and for the cure of discharge from the ear—the invention of Dr. Castro, M. D., author of "Deafness Practically Illustrated as to its Nature and Treatment," etc.

The self-adjusting Artificial Tympanum was first introduced to the notice of the profession at the meeting of the Medical Society of London, on the 20th of November, 1863. An animated discussion ensued on the reading of the paper, and several members of the Society bore testimony to the success of the remedy and the importance of the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-Adjusting Artificial Tympanum, as he had observed the immense benefit a young lady friend of his had received from it. She was in fact, quite deaf, and in a most miserable state; the effect of the tympanum was instantaneous—quite like a miracle. Five more testimonials from Members of the Medical College, New York, and the principal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and Kearny streets. Entrance on Market street.

Dr. Mr. Editor—Having been afflicted with deafness for the last two years, originating from a severe cold, and for the last month suffering from the most excruciating pains in my ear, I was obliged to come down to San Francisco to seek relief. After a physician's recommendation to wait on Dr. De Castro, on the corner of Kearny and Market streets, and underwent one operation, and it is with the utmost pleasure I can say my hearing was suddenly and without pain entirely restored. I deem it my duty to make this known to the public, and to recommend Dr. De Castro's skill as an aurist.

JOHN REESE, Napa Valley. James Callaghan, witness, San Francisco, July 30th, 1863.

[From the Daily Alta.] San Francisco, June 30th, 1863.

ED'S DAILY ALTA: Permit me through your widely circulated journal, to say that my daughter Mary Ellen, has been afflicted with deafness since she was thirteen months old, and that she has been a member of the Deaf and Dumb Institute since it was organized. On taking her to Dr. De Castro, on the corner of Kearny and Market Streets, and undergoing under his direction, two operations, she has heard sounds very distinctly; and is now, I am happy to state in a fair way to get permanent relief. The result, thus far, is satisfactory; and I deem this notice due to Dr. De Castro for his skill; and would recommend all parties similarly afflicted to give him a trial. My daughter has at different times been under the care of the most skillful physicians and aurists in California, but up to the period of visiting Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT, 812 Green Street.

**APARTMENTS.**

FURNISHED APARTMENTS, WITH, OR WITHOUT Board, at 1018 Powell Street, between Clay and Washington Street. Persons desirous of a respectable home will do well to apply jy6

**To Mining Companies.**

FOR SALE.—A STEAM ENGINE AND BOILER. The Engine is 20 horse power—10 inch cylinder—24 inch stroke—solid iron frame, with heater, pumps, etc., all complete. The boiler has 5 flues, is 24 feet long, 40 inches in diameter, made up from the best three-eighths inch Low Moor Iron, and weighs about 5000 pounds.

Both Engine and Boiler are in perfect order and fully guaranteed. Apply to I. H. HAM, No. 211 Clay st. San Francisco, June 13, 1863.

**MINING CERTIFICATE LOST!**

Certificate for Ten Shares, No. 33, dated July 8th, 1863, of Tamahua Gold and Silver Mining Company. The finder will be suitably rewarded by leaving it at room 24. Government Block. LOUIS EDWARDS.



## MINING NOTICES.

**Winona Gold and Silver Mining Company.**—The first annual meeting of the stockholders of the Winona Gold and Silver Mining Company, will be held at the Company's office, No. 428 Montgomery street, for the election of five Trustees for the ensuing year, on the 19th day of September, 1863, at 7½ P. M. By order of the Board of Trustees. M. G. ELMORE, Sec'y. aug24

**Red Jacket Mining Company.**—At a meeting of the Board of Trustees of the above company held July 7, 1863, the first assessment of Five Cents per share on the capital stock was levied, payable immediately in United States gold coin, to the Secretary, office 420 Montgomery street, Room No. 2. By order of the Board. J. W. CROSLY, Secretary. aug24

**Office Table Mountain Copper Mining Company.**—At a meeting of the Board of Trustees of this Company, held July 28, 1863, an assessment of Thirty Cents per share was levied upon the capital stock of said Company, payable immediately in United States gold coin to the Secretary, at the office of the Company, No. 528 Montgomery street, or to J. M. Pike, Superintendent, at Copperopolis. M. G. ELMORE, Secretary. aug24

**Grey Ledge Gold and Silver Mining Company.** Office No. 528 Montgomery street, San Francisco. All stock on which assessment is not paid will be advertised as delinquent on the TWENTY-FOURTH DAY OF AUGUST. M. G. ELMORE, Secretary. aug24

**Office of the Niagara Consolidated Gold and Silver Mining Company.** Elwood Canon.—Notice is hereby given that the Board of Trustees have this day levied an assessment of Twenty-five Cents per share upon each and every share of the capital stock of the said Company, payable in U. S. gold coin immediately to the Secretary, at the office of the Company, No. 528 Montgomery street, or to the Contractor at the Canon. M. G. ELMORE, Secretary. aug24  
San Francisco, July 20, 1863.

**RIEHN, HEMME & CO.,  
ASSAYERS.**  
Office, Montgomery street, cor. of California,  
OPPOSITE WELLS, FARGO & CO.  
Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO  
Messrs. F. PARROT & CO., Messrs. ALBOP & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.  
CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
Assaying, also in Mineralogy and Chemistry as far as re-  
quired to become a practical Assayer.

## THE EUROPEAN ORE REFINING COMPANY.

Quartz Mill and Furnaces, Bryant Street,  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF

### ORES AND MINERALS.

In large or small quantities, for such Experienced Treat-  
ment by the

**LATES EUROPEAN METHODS,**

As may be ascertained by

### CAREFUL ANALYSIS,

At their works, to be the most Effectual in obtaining re-  
liable results, and afterwards converting whatever pre-  
cious Metals they may contain, into marketable Ingots.  
The South Park, and Folsom and Kearny street Cars  
pass Bryant street. au31

**El Paso District, Los Angeles County,  
MINING AGENCY.**  
C. W. TAPPAN, GENERAL AGENT,  
"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines  
for a reasonable consideration.  
LETTERS OF ENQUIRY, containing Revenue or Postage  
Stamps to the value of fifty cents, and enclosing an ad-  
dressed envelope for reply, will be promptly attended to.  
The subscriber has a carefully prepared map of all the  
lodes in the district, a portion of many of which are for  
sale at very low figures.

For further particulars he would refer to J. Bur-  
net, Esq., 425 Davis St., San Francisco Cal.  
El Paso, June 21, 1863. C. W. TAPPAN.  
au31

**WANTED,  
GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,**

By FRONTIER A. DEVERCY,

au31 437 Pine street, San Francisco.

## MINING CARDS.

**ALEXANDER STOTT,  
MINING SECRETARY,**  
512 Sansome Street, San Francisco.

Secretary of—

HORSE SHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

**T. C. Sanborn & Co.  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.**

**OPHIR SILVER MINING STOCK,  
GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.**

J. E. MILLER.

W. C. COLEY.

**MILLER & COLEY,  
Stock Brokers & Mining Agents  
327 MONTGOMERY STREET,  
Between California and Pine, in Jerome Rice & Co's Real  
Estate Sales Rooms, San Francisco.  
ALL KINDS OF STOCK AND MINING  
Business attended to with Promptness  
and Dispatch  
aug17**

**L. F. LELAND,  
STOCK BROKER,  
No. 621 Clay street,  
Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.  
Member of the San Francisco Stock and Exchange Board  
je-29**

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY  
**PEASE, BOWLEY & CO.,  
Real Estate, Stock and Exchange  
BROKERS,  
631 Montgomery street, San Francisco.**

LEGAL TENDER NOTES AND MINING STOCKS,  
BOUGHT & SOLD.  
je-29

**AGENCY  
For the Purchase and Sale of  
MEXICAN MINING STOCKS**

At No. 411 Clay Street, San Francisco.  
**OFFICE OF THE PENA AND LA MARRONENA SIL-  
ver Mining Companies, San Antonio District, Lower  
California.**  
All persons are invited to call and examine Ores from  
the above mines. Wm. FAULKNER. je13

**New Bedford Copper Company.**  
THE UNDERSIGNED HAVING BEEN APPOINTED  
Agents for the above Company, are receiving reg-  
ular supplies of their superior manufactures of  
SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;  
Which they offer to the Trade at the lowest market  
rate, and on the most favorable terms.  
MORGAN, STONE & Co  
je-29 108 Front Street, San Francisco.

**B. W. FISHLBOURNE,  
PRACTICAL LITHOGRAPHER,  
ENGRAVER AND PRINTER,**

No. 529 CLAY ST., CORNER OF LEIDESDORFF,  
San Francisco. State and County Bonds, Stock  
Certificates, Bills of Exchange, Bills of Lading, Bank  
Checks, Landscapes, Architectural and Marine Views  
Show Cards, Labels, Etc. executed with neatness and  
dispatch. N. B. All orders in Crayon Work promptly  
attended to.

### MINING.

N. B. Mining Stock Certificates executed with prompt-  
ness and dispatch, and at greatly reduced rates. jy6

**MYERS & DAGGETT'S  
Mining and Stock Exchange,  
No. 23½ B Street, Virginia City, N. T.**

*Mining Stocks of All Kinds Bought & Sold.*

Business connected with Mining Stocks of every descrip-  
tion promptly and confidentially attended to.

\*.\* Abstracts of Titles Furnished, Etc.

## BUSINESS CARDS.

**Napoleon Copper Mining Company.**

Capital Stock.....\$1,620,000.  
2,700 Shares—\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher  
District, Calaveras county; Incorporated  
October 3, 1862.

President.....F. MACRELLISH  
Secretary.....R. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....A. W. HASKELL

#### TRUSTEES.

F. MACRELLISH, of Alta California  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOOLWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je29

**The Pacific Mineral Company**

MAKE LIBERAL ADVANCES UPON THE ORES OF  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, and SULPHURETS CONTAINING GOLD.  
Due account taken of all valuable metals combined  
with Silver and Copper Ores, and advances made there-  
for.  
Parties owning undeveloped mines and desiring capital  
to prospect the same will receive assistance, if, upon ex-  
amination, such lands are deemed sufficiently valuable  
to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je14f Montgomery Street, San Francisco.

**MARTIN & Co.,**

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

**Purchase of Copper Ores,**

Assaying 8 per cent and upwards of Copper to the Ton.  
We will make ADVANCES upon Ores of COPPER, TIN  
and NICKEL.

Sacks will be furnished and Freight Paid on all con-  
signments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York, San Francisco.  
San Francisco Post Office, Box 1259.  
je 1.

**To Mining Companies about to In-  
corporate.**

**JOHN ARMSTRONG,  
CONVEYANCER,  
610 Merchant Street,  
San Francisco.**

Is Prepared to draw with Accuracy and Dispatch,  
Certificates of Incorporation—Trust Deeds,  
and all other Papers,  
necessary to the correct Incorporation of Mining Com-  
panies, on reasonable terms.  
All letters of enquiry cheerfully and promptly an-  
swered. Address as above. jy27

**TO MINING COMPANIES!**

**Offices To Let.  
SUITES OR SINGLE ROOMS,  
IN  
Government Block,**

N. W. Cor. of Sansome and Washington sts.

au-24

**San Antonio Gold and Silver Mines,  
LOWER CALIFORNIA,**

**FORWARDING & MINING AGENCY.**

**SAMUEL SMITH,**

OFFICE—North West Corner of Front and Clay  
Streets, San Francisco.

**MINING MACHINERY AND MERCHANDISE FOR-  
warded, Mining Claims secured, through the  
resident Agent at San Antonio, and information fur-  
nished regarding any claim, in that Territory, on Com-  
mission.** je-26

**H. C. KIBBE,  
MINING SECRETARY,**

**Commissioner for Nevada Territory,**

543 Sacramento st., cor. Montgomery

(ARMORY HALL.)

## BUSINESS CARDS.

**IMPORTANT!**

**To Mining Companies, Miners,  
Prospecting Parties, Commanders  
of Ships, &c., &c., &c.**

**THE UNDERSIGNED HAS RECEIVED  
A new supply of the celebrated  
DESICATED AND COMPRESSED  
VEGETABLES,**

Of Messrs. CHOLLET & CO., PARIS, which he offers for  
sale in lots to suit.  
These Vegetables being perfectly fresh and sweet, at  
the best preventive of scurvy and other diseases result-  
ing from the continued use of salt provisions.  
They are already cleaned and prepared for cooking,  
are perfectly preserved, and offer great advantages for  
transportation. 25,000 rations being packed in the space  
of one square yard, while 2,000 rations—or equal to 100  
lbs fresh vegetables—weigh only from 100 to 125 pounds  
CHARLES MEINECKE.  
aug 3 No. 215 Front street.

**SOUTH PARK**

**Quartz Mill and Reduction Works**

**GOLD AND SILVER ORES WORKED AT REASON-  
able rates, and Working Assays made of small  
lots. All kinds of ores crushed at short notice.**

J. H. SMITH & CO.,  
Office in Shiel's Block, opposite Masonic Temple.  
je13 S. F. CLOUSER, Secretary.

**W. W. HANSCOM,  
Steam and Mechanical Engineer,**

Designs furnished, and Drawings made for  
Engines, Mills, Water Wheels, Mining Ma-  
chinery, etc., etc.,  
At Golden State Iron Works,

aug x First Street, San Francisco.

**MINING & SCIENTIFIC PRESS.**

**THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.**

**THIRD YEAR! VOLUME VI.—NEW SERIES**

A new volume of this extensively circulated paper,  
commenced Sept. 11, 1862. It is intended that every  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits  
together with several original engravings of new inven-  
tions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietary to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published.

**The Mining Interest!**

Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of Min-  
ing Stocks, new inventions of Machinery adapted to the  
purpose, and of everything generally that may be of ser-  
vice to the Miner.

**The Inventor!**

Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having had  
great experience as Patent Agents, together with fac-  
ilities at Washington that enable them to obtain Patent  
with dispatch.

**The Mechanic and Manufacturer!**

Will be greatly benefited by its perusal, as the  
numbers contain from time to time contain original en-  
gravings of new machines and inventions, together with  
large amount of reading matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.

**To Chemists, Architects and Millwrights**

This journal will be invaluable. All new discover-  
ies in Chemistry will be given, and a large amount of in-  
formation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plan-  
ters will be kept abreast of the progress of the agricul-  
tural implements, and the farming interest gen-  
erally will be amply discussed.

#### Terms.

To mail subscribers—Four Dollars per annum  
**Club Rates.**

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Fifteen Copies for Twelve Months, \$44.

Twenty Copies for Twelve Months, \$56.

For all clubs of Twenty and over, the yearly subscrip-  
tion is only \$2 80. Names can be sent in at dif-  
ferent times and from different Post-offices. New  
copies will be sent gratis to any part of the country.

**EWER & SMITH, Publishers.**  
Room 57, Government House, Corner of Washing-  
ton and Sansome streets, San Francisco.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, SEPTEMBER 7, 1863 NO. 45.

#### THE REAL DEL MONTE MINE AND MILL.

One of the most promising mining enterprises on the Eastern Slope, at the present time, is that of the Real del Monte, Consolidated Gold and Silver Mining Co. The Company is now putting up a mill, which will be a cond to none on this Coast. Its cost will be about \$150,000. The location of mill is described by a correspondent of the *Alta* as a pleasant situation at the junction of Bodie Creek and Esmeralda Gulch, about two miles from the mines of Last Chance Hill. The main building is 160 by 60 feet, with an engine room adjoining, 36 by 47 feet. The mill will have 30 stamps, with 24 of Wheeler's pans, and 12 separators.

The rock, on reaching the mill, first passes under two ponderous stamps or "spallars," weighing 1700 lbs. each, working upon dies, enclosed by iron grating. These stamps have three feet fall and merely break the rock sufficiently fine to pass thence under the battery. This crushing apparatus is placed in front of the battery, and at a convenient elevation above it. The mill is capable of crushing about 45 tons of rock per day, and will be in full operation about the first of November next.

#### THE ENGINE.

The Mill is to be driven by a beam Engine, having a cylinder of 16-inch bore with 36-inch stroke, with balance valves of the most approved style, and Winter's variable cut-off arrangement, which gives the engineer the most perfect command of the steam, from the full stroke down to three-eighths.

This Engine has been built at the Miners' Foundry, where the finishing work is now being put upon it, and is one of the best pieces of work in that line which has ever been turned out on the Pacific Coast.

In the design of this Engine the gothic style of architecture has been generally observed. It is constructed upon substantial foundation, 17 feet long and 5½ wide, securely bolted and bolted. Two gothic arches rise from the centre of the foundation plate, as supports for the beams, which are beautifully ornamented and painted with Union emblems, among which appear, at different points, 13 brilliant stars, the whole surmounted with an elegant gilt eagle. In front of the Engine, is a convenient platform from which two columns arise, the one on the left containing the throttle valve, and that on the right the unhooking gear. They are so arranged that the engineer can readily work both at the same time, and also work the engine by hand, without changing its position.

One peculiarity, deserving of especial attention, connected with this Engine, is the arrangement of a rotary cam or rock shaft for working the valves. One important advantage claimed for this arrangement is that the valves may be opened and closed very quickly; another advantage grows out of the facility with which the exhaust valve may be made to follow the steam valve at exactly the proper distance—a result impossible to be accurately obtained with a vibrating shaft. The rotation of the cam shaft is obtained by suspending the excentric rod by a movable link attached to its centre. This, we believe, is the first time this motion has been applied to a steam engine on this coast. The govern-

or is conveniently arranged and is exactly balanced, and, running by a gear, is not liable to any possibility of irregularity in motion; and will throttle the engine at the slightest appreciable increase of speed.

This machine was designed and draughted by Mr. I. M. Scott. The entire work, both in design and execution reflects great credit upon the parties named. It will be driven by two tubular boilers, each 16 feet long and 50 inches in diameter. The balance wheel, which is cast in sections, is 18 feet in diameter and weighs about five tons.

When this mill is in full operation, our friends in Aurora, will be able to point out to visitors in that region a mill and engine, which in completeness and substantial finish, will compare favorably with anything in Virginia City, not forgetting the famous Ophir or justly lauded Gould & Curry Mills.

The Aurora lode, one of the Company's Consolidation claims, is in splendid working order. The lode has been opened out in chambers or tunnels, intersecting for the distance of 400 feet, by which means 100 tons can be taken from the mine daily. The face of the ledge is now 16 to 18 feet wide, all pay rock, and will average from \$125 to \$150 per ton. The richest of the ore taken from the mine, is being sacked and reserved until their mill is ready for active operation.

#### LARGE BRASS CASTING.

Passing by the Miners' Foundry, a few days since, our attention was directed to a large piece of brass work upon which the workmen were engaged in the area just above the Office. On enquiry, we learned that it was designed for a double acting Force Pump for the "Silver State Reduction Works."

The Cylinder was a 14 inch bore, allowing a 36-inch stroke, and weighing 1600 lbs. This, we believe, is the largest brass casting ever made on this coast. It was handsomely finished, with two valve chambers of cast iron, each surmounted with a copper air dome, four feet high and 22 inches in diameter. The suction and discharge pipes were each 12 inches in diameter. The work was designed by Mr. I. M. Scott, Draughtsman for the Miners' Foundry, and appears to be especially well adapted for the work for which it is designed.

It is the intention of the Company to place this pump in their mill for the purpose of meeting the exigency of fire. A large tank will be placed upon the comb of the roof, extending its entire length, with its floor or bottom perforated with a large number of holes, thus making it like a sieve. In case of fire this force pump will be set in motion, throwing a constant 12-inch column of water into the tank, which will thence be distributed over the roof and down the sides of the building, thus enveloping it in a complete sheet of water, while for the inside, hose are attached to the bottom of the tank in such a manner as to completely flood the interior of the building at the same time. The idea is a most excellent one, and we would suggest its adoption by all our large mill establishments. Such an arrangement, kept in working order, with power at hand for instant application, must be an effectual safeguard against any possible serious loss by fire.

#### THE GOLD MINES OF WALES, (ENG.)

The English papers are still giving favorable accounts from the gold mines of Wales. Mr. J. Mosheimer, formerly of this city, now operating in those mines, writes to the *London Mining Journal*, of July 18th, as follows:—

"To prove that the gold fields of Wales are not yet exhausted, I will give you a few facts of a new discovery near Bala, in the so-called Castle Corn Dockan Mines. The lode is directly under the ruins of an old castle, and no doubt, the former occupants built their strong hold to guard their treasure underneath. It is remarkable that the gold there had not been discovered long before this, as all the loose boulders on the ground contain visible gold, and even in the wall built with those boulders the gold could be seen. The finding of this valuable discovery is due to a boy of about twelve years of age, who, while playing among those rocks, found gold in perfectly white quartz. The property is worked by a company who have opened the lode to a depth of 20 feet, where it is three feet wide, with decomposed quartz."

Mr. Mosheimer took a sample of the rock, and subjected it to a practical working by crushing and amalgamating, and obtained a yield at the rate of ten ounces to the ton. The Company has ordered machinery for the mine, which will be put up with all convenient dispatch.

One John Perry communicates to the same issue of the *Journal* the following:—

"It is likely some of your readers will be glad to learn that I have discovered, this week, in one of our mountain hills, a lode containing splendid visible gold. This is a great encouragement to go on still with our efforts, and I dare say this discovery will have great influence on the interest of several mines situated around it. You may expect some further particulars with regard to this very shortly."

#### GOLD IN SCOTLAND.

Scotland contains both gold and silver mines. Gold is not unfrequently found on the mountain sides, after heavy rains, in grains or attached to pieces of quartz and sapphire. There is a gold mine on Crawford Moor and another on Fryer Moor, in Clydesdale. There are also two other mines in Widsdale, and three on Glangaker Watten, in the Forest of Attire. One Cornelius once discovered a gold mine at Crawford John, and in thirty days time took to the mint, at Edinburgh, eight pounds of native gold, worth about \$22,000. Scotland also contains valuable mines of lead, iron, copper, etc.

THE COPPER MINES OF PRUSSIA.—The high price of copper has caused a greater activity than usual in the copper mines of Prussia within the past two years. The produce of 1861 was 2273 tons against 1964 tons in 1860. The average yield of ore not far from 300 tons to each mine worked.

POWER OF POWDER.—A distinguished engineer officer, who took a prominent part in the bombardment of Fort Pulaski, has made a calculation based upon the destruction caused by the late powder explosion in Eighty-sixth street, New York City—that had our artillery succeeded in exploding the enemy's magazine at Fort Pulaski, to which its main effort was directed, the result would have been the annihilation of both the opposing forces. No man would have been left to tell the tale, no stone left upon another to mark the sight of the contending foes.



## THE MINERS' LABORATORY.—NO. XIV.

## SILVER.

*Kerate.*—Chloride of silver, Hornsilver. No cleavage observable. Fracture conchoidal; uneven, earthy, transparent, translucent on the edges. Lustre waxy inclining to adamantine. Pearl-grey, passing into various shades of blue and green, yellowish white. Grows brown when exposed to light. Streak shining malleable, and sectile. Specific gravity, 5.55 to 5.60. Before the blow-pipe, melts very easily, with ebullition, and is gradually reduced into a globule of silver in the inner flame. Is reduced when rubbed with water on iron or zinc. Soluble in ammonia and crystallizes from the solution in octahedrons.

## ANALYSIS OF THE MINERAL KERATE.

	1	2	3
Silver, .....	67.75	76.00	68.00
Chlorine, .....	27.50	24.00	32.00
Red oxide of Iron, .....	6.00	—	—
Alumina, .....	1.75	—	—
Sulphuric Acid, .....	0.27	—	—

This mineral is found in crystals, reniform, investing other substances and massive in veins in the older rocks with some of the other ores of silver, is found in nearly all the silver bearing localities—considerable quantity is found of it in the California and Nevada silver mines.

*Embolite.*—Fracture hackly, lustre adamantine, sulphur yellow; siskin-green on a freshly fractured surface; olive-green on the exterior perfectly malleable. Specific gravity 5.789 to 5.806.

## ANALYSIS.

Bromine, .....	20.09
Chlorine, .....	13.05
Silver, .....	66.86

*Bromide.*—Bromide of silver—Bright, olive green, passing into yellow, acquires a grey tarnish, streak siskin-green; specific gravity, 5.8 to 6.0

It melts very easily before a blowpipe. Is but feebly acted upon by acids, soluble in warm concentrated ammonia.

## ANALYSIS OF A SPECIMEN FROM MEXICO.

Bromine, .....	42.5
Silver, .....	57.5

Is found rather abundantly in very small crystals and crystalline grains, with Iodate and cerussite in the mine of Sanonofre in the district of Plateros in Mexico, and with Kerate in the silver mines of Copiapo in Chile.

*Iodide.*—Iodide of Silver—Transparent, translucent, lustre resinous, approaching to adamantine, yellowish-grey, greenish-yellow, streak shining, specific gravity 5.504.

Before the blowpipe on charcoal it becomes red; melts very easily and imparts a purple color to the flame; in the inner flame yields a globule of silver; soluble in concentrated nitric and hydrochloric acids with evolution of vapor of iodine.

## ANALYSIS.

Iodine, .....	36.88
Silver, .....	64.25

## MINERALS NOT MUCH KNOWN—IMPERFECTLY DESCRIBED.

*Gold Amalgum.* In small white globules, in the Platinum Steam Works of Columbia.

## ANALYSIS.

Gold, .....	38.39 per cent.
Mercury, .....	59.40 " "
Silver, .....	6.00 " "

*Aphphorite.*—Steel-grey, compact, specific gravity 4.87; melts easily before blowpipe.

## ANALYSIS.

Sulphur, .....	30.05
Antimony, .....	24.77
Copper, .....	32.91
Silver, .....	3.09
Lead, .....	0.04
Zinc, .....	6.40
Iron, .....	1.31
Cobalt, .....	0.49
Stony matter, .....	1.29
Arsenic, .....	traces.

*Bismuthic Silver.*—Fracture uneven, fine grained, opaque, lustre metallic, light lead-grey; acquires a dark tarnish by exposure; soft, sectile.

## ANALYSIS.

Silver, .....	15.00 per cent.
Lead, .....	33.00 " "
Bismuth, .....	27.00 " "
Iron, .....	4.30 " "
Copper, .....	0.90 " "
Sulphur, .....	16.30 " "

*Bromargrite.*—Fracture uneven, no cleavage observed, lustre metallic, streak blackish-grey, specific gravity 5.950. In the matrix decrepitate, passes and yields a slight orange sublimate in the lower part, and a white sublimate

above. Before the blowpipe, on charcoal, melts below redness, emits the odor of sulphur, and white fumes, and leaves globule of silver, surrounded by a yellow aneala of oxide of lead. Partially decomposed by nitric acid. Soluble in a large quantity of boiling hydrochloric acid.

## ANALYSIS.

Sulphur, .....	19.24
Antimony, .....	29.77
Silver, .....	24.77
Lead, .....	24.91
Copper, .....	0.62
Iron, .....	0.26
Zinc, .....	0.36

*Blende.*—Sulphuret of Zinc; very frequently contains small quantities of both gold and silver. There is not anything in the appearance of the blende to indicate the presence of silver. Should parties come across deposits of this mineral, it would be better that they pass it over to the hands of an experienced assayer, to prove the presence of the precious metal and also to what extent.

## THE ANTIOCH SMELTING WORKS FIRING UP.

We have been informed that the furnace of the California Copper Smelting Works, at Antioch, has been in operation since the 2nd of this month, but they are not ready to smelt as yet; the Superintendent requiring some two or three weeks to heat and prepare the furnace. We shall soon be able to form an accurate idea as to the value of Mount Diablo coal for metallurgical purposes. The furnace, we understand, is to all intents of the same kind as those now in use at Swansea, South Wales, Great Britain, with the exception of the fire place, which has been modified so as to allow the use of the lignite coal. Should this coal produce the necessary heat for the smelting of copper, we see no reason why the present enterprise would not be a profitable one; and if so, at no very distant date, we shall have other manufactories of a similar character, along the foot hills of old Diablo, on the sides of the road leading thither and along the banks of the San Joaquin. Our hearty wish is success and good luck to the young copper smelters.

## BATTLES AND RAINS.

The theory of Professor Espy that rain may be produced in any locality by that disturbance of the atmosphere which results from great or continued conflagrations, is supposed to have found confirmation during the present rebellion. It has certainly been remarked that rain showers of considerable violence and duration have generally followed or attended all the great battles of the present war, in which an unusual proportion of the heaviest class of ordinance has been employed. Indeed, it would appear by accounts from the South, that the very climate of that region, has been effected during the past and present season. The usual diseases peculiar to many localities, there, have been almost unknown. The weather has been cooler than usual, more rain has fallen and the atmosphere appears to have assumed a more health-giving and enervating influence than ever before known during the Summer season. Whether this is attributable to the chemical effects of burning such an immense amount of "villanous Saltpetre," or to the tremendous concussions produced by the extraordinary weight and amount of artillery employed, or to some other cause may at some future time, be made a matter of serious enquiry.

Unfortunately for the theory of Professor Espy, however, the circumstance that rains usually follow great battles, was a noticable and recorded fact even before the employment of firearms in war. An Eastern cotemporary has hunted up the following paragraph, which occurs in Plutarch's life of Caius Marius, who, in speaking of a great battle that occurred some fifteen hundred years before the use of gun-powder in Europe, says:—

The opinion of Archibolus is confirmed, that fields are fatened with blood. It is observed, indeed, that extraordinary rains generally fall after great battles; whether it be that some deity chooses to wash and purify the earth with water above, or whether the blood and corruption, by the moist and heavy vapors they emit, thicken the air, which is liable to be altered by the smallest cause."

THE PACIFIC MONTHLY for September has been laid upon our table. Its contents are, as usual, varied and interesting and marked with a good degree of literary ability. We notice especially a very valuable article on "The Mines of California," from the pen of John S. Hittell, Esq.

## NEW THEORY OF THE GENERATION OF STEAM.

We have now before us the second edition of Mr. Williams' work "On Heat, in its Relations to Water and Steam; embracing new views of Vaporization, Condensation and Explosions," in which the new theory is carefully demonstrated. Mr. Williams considers the subject under thirteen heads, including the three states of water, Vaporization, diffusion vapor, heating and expanding of water, the boiling point, ebullition, vapor in water, condensation, the vacuum, evaporation, spontaneous evaporation, explosions and the jet, respectively. The position which Mr. Williams maintains is that there are sufficient scientific and reasonable grounds asserting that water, or its atoms, can neither be heated nor expanded, and still retain the character of liquidity, and the property of attraction among their fellow-atoms; that the prevailing theories as regards ebullition are altogether erroneous; that the so-called boiling point, as regards temperature, is merely that point at which the water is charged with vapor to saturation, under the true Daltonian theory, the water acting the part of a mere vacuum; that we have strong grounds for believing that there is no difference between a cause which produces divergence and mutual repulsion among the atoms of a liquid on becoming vapor, and that which produces a similar divergence and repulsion in the pith of gold leaves of the electroscope; that if there be such thing as thermo-electricity, we are warranted in concluding that it acts in the same way, and on a similar principle, atoms of a liquid as on those of other bodies; that we have rational grounds for believing that explosions in steam boiler are frequently the result of the accumulated steam (pressure in the body of the water) being suddenly released by the removal of the pressure from the denser medium of the water into the lighter one of the air; that Watt's theory of steam being condensed and reconverted into the liquid state by direct action of cold water is altogether erroneous; that vapor or steam cannot give out its heat to water, and is mixed mechanically with it on the true Daltonian theory; and that we have no grounds for inferring that there can be more heat in the body of steam than there are distinct atoms of the matter of water, each of such atoms having its own equivalent of heat electrically or otherwise combined with it—accumulation being the sole grounds of expansion and pressure. In judging of the value of Mr. Williams' conclusions, it should be borne in mind that his experience, which extends over a period of nearly half a century, has been gained in connection with two of the largest and most successful steam companies in the kingdom—the Peninsular and Oriental Steam Navigation Company, and the City of Dul Steam Packet Company, and that he has always given much attention to the subject.—*London Mining Journal.*

The *London Mining Journal*, in another issue, referring again to the above theory of the generation of steam, speaks of a paper read before the Liverpool Literary and Philosophical Society, by Mr. E. J. Reed. The object of the paper was to show that the first effect of applying artificial heat to water is not to heat the water, as such, but to convert a certain portion of it into vapor. Mr. Williams (the discoverer of the new theory), first drew attention to the fact that the rise of the generated vapor, and its diffusion through the liquid were plainly visible to the eye, a discovery which seemed to have escaped all previous experimenters. Edwards, an analytical chemist of Liverpool, exhibited a beautiful experiment illustrative of this discovery, by means of an electrical light. On heat being applied to a glass vessel containing water, instead of the series of ascending and descending currents described by all previous writers, a continuous movement upwards of cloud-like vapor was made visible to the audience. After explaining this discovery, length, and demonstrating that the movements made visible were those of vapor and not heated currents of water, the author drew several important inferences from the phenomenon, such as that it is untrue to say, as many authors do, that vapor is formed at the surface of water only; that water, even when of a low temperature does not condense vapor, reconvert it into water; that water is capable of containing, and, when what is called warm or hot, does contain condensed vapor or steam. It was urged that Mr. Williams' discovery rendered a revision of the common theory urgently necessary.

AN ELECTRIC DOG.—There is at Dayton, (says the *Virginia City Bulletin*), decidedly the greatest phenomenon of the present day. It is no less than an electric dog, which, when rubbed on the back by a human hand and the other placed on the dog's belly, the person experimenting will receive an electric shock equal to that of any battery. This singular canine is said to possess properties for curing rheumatism, gout and all other complaints subject to cure by the battery.



**WILLIAM BRODIE & CO.,**  
**CALIFORNIA FOUNDRY,**  
Fremont Street, near Market, San Francisco.

**Light and Heavy Castings,**  
Every Description, Made to Order. Particular attention paid to all kinds of House Work, Plumb and Ornaments.  
Jy 13

**ASSAYS!**  
**Promptness and Accuracy Secured**  
By the Use of the Most Improved  
METHODS OF  
**ANALYSIS!**

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,**  
(FROM EUROPE.)  
Rm 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. Jy 6

**BAUNCHEIDTISM,**  
THE PRESERVER AND PRODUCER OF LIFE.

THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF  
curing disease, is a "fait accompli" in medicine,  
and needs no more proof. The public has crowned it  
with an extraordinary patronage, and it is  
acknowledged by all men of science that BAUN-  
CHEIDTISM is founded on a rational, scientific basis.  
It is safely, and with sure success, applied to pa-  
tient consequence of syphilis, Prolapsa and Rheu-  
matism of every description, which kind of complaints  
and their only relief by the above method.  
It is easily and can be applied successfully, in the spring  
of the year to diseases of the eye.  
Borchers is the only doctor in California who has  
original series of Dr. BAUN-CHURCH and his original  
Dr. Borchers is also in possession of original letters  
of the inventor of the method by which he can prove  
that he is perfect master of the latter.  
DR. J. C. BORCHERS.

10 Kearney street, and No. 4, Mark's Place, First  
St. No. 5. Office hours from 9 to 11 A. M., and 1 to  
7 to 9 P. M. Jy 21

**I. C. E. KLEPZIG & CO.,**  
**GUN MAKERS,**  
...AND...  
**DEALERS IN GUN MATERIALS,**  
Washington street, San Francisco,  
[One Door above Kearney street.]

Pairing done in a workmanlike manner at the short-  
notice. Also Silver Plating, by E. Ekland. Jy 21

**Giffards Injectors,**  
SUPPLYING BOILERS WITH FEED WATER  
without Pumps. No Mill or Mining Company  
should be without one of these valuable instruments.  
See a Circular.

DAVID STODDART, Agent.  
Cor. Pine and Front Sts., San Francisco.

**PATRONIZE**  
**HOME MANUFACTURERS!!!**

**James Longshore,**  
**Trunk and Valise Manufacturer,**  
Sansome Street, under Teham's House. Trunks and  
Valises, Wholesale and Retail, Fine and Leather Trunks,  
and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.

**New Style of Ladies' Buckle!**

**W. BOHM,**  
INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the  
construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
possesses several very important improvements over any  
other in use.

Invention having been carefully examined at the  
Pat. Office, has been adjudged to be a useful improve-  
ment and Letters Patent have been granted for 17 years.  
It is all other buckles in

**Usefulness, Strength and Appearance.**  
Public is respectfully invited to call and examine  
this buckle at the Jewelry Establishment of  
BRAYMAN & LEVY,  
621 Washington Street, San Francisco.

JOSEPH, BROTHERS,  
607 Montgomery Street, San Francisco.

FLOBERG & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm," will be  
guaranteed as to its Strength and Durability.  
W. BOHM, Patentee.

**THE**  
**BRYAN BATTERY.**

The vast interest involved in the reduction of ores on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of  
the most Effective, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
class of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

**ALONE STANDING THE TEST.**

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

**METHOD OF CRUSHING ORE.**

THE BRYAN BATTERY, as now constructed, is believed  
to combine all the improvements which the experience  
of the past has afforded. They have been

**EXCLUSIVELY ADOPTED**

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

**EFFECTIVE, SUBSTANTIAL AND RELIABLE.**

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ities. They are adapted to

**BOTH WET AND DRY CRUSHING,**

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent, more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1830, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing completely about 6,000 pounds,  
and the Five Stamp about 7,000. The Mortar Bed being  
cut in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso,  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hewes, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works,  
Amagoza Mining Co., San Bernardino.


**MANUFACTURED ONLY BY**  
**GODDARD & CO.,**

**At the Pacific Iron Works.**

**SAN FRANCISCO.**

**nos 125 to 136 First street, and 126 to 144**

**Fremont street.**

**John R. Sims,**  


Oregon street, between Washington and Davis and Froo  
and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and**  
Shutters, Bank Vaults, Grating, Cemetery Rail-  
ings. All orders from the interior Oregon, Washington  
Territory, Vancouver's Island, British Columbia, or any  
place on the Pacific coast, attended to with promptness  
and dispatch.

**Mr. Sims Appreciates the Past**  
liberal patronage of his friends, and trusts that he may  
continue to merit it in the future.

**For the Information of Strangers**  
he would say that he feels confident that his experi-  
ence in his particular calling is surpassed by none on  
this coast, which his superior work, sent to almost every  
town in this State, Oregon, also Victoria and the Sand-  
wich Islands, and to be seen on some of the best build-  
ings in San Francisco, fully attests. A large assortment  
of second hand shutters for sale at low rates. ap 13

**LEANDER RANSOM,**  
**Civil Engineer**  
AND  
**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

**ALSO**  
**STATE LOCATING AGENT.**

And as such having the sale of  
**600,000 ACRES OF STATE SCHOOL**  
**LANDS,**

**At the low price of \$1.25 per Acre.**

Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. cor-  
ner of Montgomery and California streets. oct-3m

**D. NORCROSS,**  
Masonic Temple, No. 6, Post Street.

**Military Goods of all Descriptions.**  
**Navy Trimmings and Embroideries.**

**REGALIA FOR ALL ORDERS.**  
aug 17

**E. C. DAKE,**  
DEALER IN  
**CLOTHING,**

AND  
**Gentlemen's Furnishing Goods;**

ALSO  
**HATS, CAPS, ETC.**

**AT THE NEW YORK CLOTHING STORE,**  
**541 & 543 Washington st. Montg'my Bldg**  
Jc] Old No. 145. [29

**FOR SALE.**

**PATENT PRESSED RUSSIA IRON MINING PANS.**  
Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

**UNEQUALLED**  
**MONITOR COOKING STOVE**

**OR RANGE,**

**FOR HOTELS.**

To which we call particular attention.

Jc-20 TAY, BROOKS & BACKUS.

**DEVELOPEMENT OF MINERAL WEALTH IN**  
**ARIZONA BY GOVERNMENT.**—A private letter  
by Gen. J. R. West, dated Hart's Mills, Tex-  
as, August 1st, to a friend in San Francisco,  
has the following important intelligence:

Say to the gentlemen in *feet*, that it has  
been stated every way but officially yet, that  
I am to command a body of troops whose spe-  
cial mission, while exterminating the Apaches  
will be to settle and develop the mineral  
wealth of Arizona. This wealth is almost  
fabulous. I had proposed writing you what  
had been officially communicated to me in  
regard to the recent gold discoveries near  
Tucson, but as I may probably visit that sec-  
tion of the country ere long, I will defer do-  
ing so until I can give you my personal ex-  
perience. In my opinion, Arizona will yet  
startle the world as much as ever did Cali-  
fornia or Washoe, with mineral wealth.

**PEOPLE'S**  
**Steamship Line!**  
**Connecting California and New York**  
**VIA NICARAGUA.**

**750 Miles Shorter than any other Route!**

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**

J. H. BLETHEN..... COMMANDER

Will be dispatched for

**SAN JUAN DEL SUR,**

From Mission street Wharf.

**SATURDAY, - - - - OCTOBER 3, 1863**

Punctually at 9 o'clock, A. M., on

Connecting at GREYTOWN with the Splendid Steamship

**ILLINOIS - - - - - 2500 Tons.**

Reduced rates of Passage and quick trips are secured

by the reopening of the Nicaragua Route.

These Steamers are unsurpassed for speed, cleanliness

and safety, and every effort will be made to insure the

comfort of passengers.

For further information apply to

I. K. ROBERTS, Agent,

**UNION**

**IRON AND BRASS FOUNDRY.**

The First Established in the State.)

CORNER OF FIRST AND MISSION STREETS, SAN FRANCISCO

**HAVING ADDED TO THE SEVERAL**  
Departments all the recently improved Tools, this  
Establishment is now the most Extensive and Complete  
of any on the Pacific Coast.

The undersigned are prepared to furnish, at short no-  
tice, Locomotive, Marine and Stationary Engines, of ev-  
ery size and description.

**BOILERS.**

Locomotive, Fine, Tubular, Upright and Cylinder, fur-

nished with or without engines, complete.

Machinery and Castings of every description, Saw-

mills, Grist Mills, Car Wheels, Derrick Irons, etc.

**QUARTZ CRUSHING BATTERIES**

Embracing a great variety of Stamp, Mortar and Cam

Patterns.

**AMALGAMATING MACHINERY,**

Varney's Improved Patent Pans and Settlers, Wakely

Pans, Amalgamating Tubs, Plasted's Grinders, Chile

Mills, Concentrators, etc., etc.

**MINING PUMPS.**

Cornish, Lift and Force Pumps, from four to

eight feet stroke, with Pipes, Bob Mountings, and Gear-

ing complete.

**HOISTING DRUMS.**

For Shafts or Inclines, with clutch, friction or V cone.

Sole Agents and Manufacturers for the Pacific Coast, of

C. and G. M. Woodward's Celebrated Patent Safety

Steam Pumps and Fire Engines.

All Contracts and Orders executed with promptness

and dispatch, and at reduced prices for Cash.

Jc21 DONAHUE, BOOTH, & CO.

**Washoe Correspondence.**

**A. C. MORSE,**  
**Mining and Real Estate Agent,**

Office—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS**

with Messrs S. MARKS & Co., one of the principal  
Stock Brokers of San Francisco, am prepared to BUY  
and SELL every description of Mining Stocks in Esme-  
ralda District

P. DONAHUE, H. J. BOOTH. C. S. HIGGINS



## DISCOVERIES IN CHEMICAL SCIENCE.

Discoveries in chemical science, for the past few years, have followed each other with such rapid succession, that the working chemist has almost ceased to be surprised at any announcement of new discoveries in that branch of research. His chief ambition seems to be that he too may be fortunate enough to be able to announce some important fact, which shall place his name conspicuously upon the roll of discoverers. Indeed no chemist of the present day considers himself entitled to much consideration until he has made an actual addition, in the way of some valuable discovery, to the domain of his favorite science. So far from perfection is the science of chemistry supposed to be at the present time, that an eminent chemist has recently remarked that there is a future, and a no very distant one either, at which the present notions on the subject will be regarded with as much ridicule as we now regard the attempts of the alchemists of former times to produce gold by a combination and manipulation of the baser metals.

It is scarcely sixty years since chemistry assumed a place among the practical arts, yet its influence upon the commercial interests of the world is already immense. Instances are not unfrequent where important industrial pursuits in one country have been entirely destroyed by the chemical skill and industry of another.

The manufacture of beet sugar, at one time threatened to overturn the industry of the Antilles, and might indeed have succeeded had not taxation come to the aid of the latter. Beet and sorghum sugars, owe their very existence to recent discoveries in the laboratory.

The gas works of Europe have destroyed the monopoly which Egypt once held in the manufacture of sal ammoniac from camels' dung. The chemist has taught us that the refuse of gas manufacture contains this salt in abundance.

Sicily, until recently, derived large revenues from her exports of sulphur to England and France for the manufacture of sulphuric acid. The chemist has now taught the ore smelters of those countries that they can readily and cheaply obtain all they require of this acid from their pyrites and sulphurets.

Europe, within a few years, was lamenting the destruction of the forests of Russia and America, as likely to prove a serious draw back to the manufacture of potash, a rapidly growing necessity. The anxiety on that point was promptly met and allayed by the chemist after some considerable experimenting, who showed that an inexhaustible resource of that description might be found in the refuse of the beet sugar manufacture and salt marshes all over the world.

It is but a very few months since we have witnessed the introduction, upon a commercial scale, of a large series of ordinary articles in domestic use made of a metal, (aluminum or the metal of clay) which is of itself of quite recent discovery, and which until within a few months has been so rare as to be regarded as a valuable curiosity. The present abundance of this metal is purely the result of recent chemical investigations and discovery. It is only since the commencement of the present year that we have heard of the great commercial value of the discovery of a method of obtaining the most brilliant and valuable colors from so unpromising an article as common coal oil and tar, and their application in connection with dyeing and calico printing. An entirely new metal known as "thallium" has quite recently been discovered, for the honor of which discovery, two distinguished chemists are even now contending.

But a very short time ago, a work on practical chemistry would have contained no allusion to aniline or benzole; paraffine, aluminum or thallium. Now these substances, with the exception perhaps of the last, are materials of large manufacture and a work on chemistry which should now be published without treating upon them, would be considered very imperfect. Judging from the past, we may reasonably expect that there are numerous substances now known only in the laboratory which will, ere long, become familiar in the factory.

Our own community is even now agitated with the discussion of what is assumed to be a most important discovery in the way of a flux for smelting copper. We have before us the most indubitable evidence of the discovery of a material, the component parts of which, to be sure, are yet unknown, but which, when employed in a crucible, in a laboratory process, produces the most astonishing results as a flux for separating copper from its ores—effecting with many

varieties of ore, at one operation, the same results which have heretofore required from four to six or eight different smeltings. The announcement of such a discovery, as may well be supposed, is received with many misgivings; yet, with the past before us, we ought not to be surprised at anything, and may be reasonably hopeful, that this present discovery may result in all that is claimed for it.

Chemistry too has no art or industry without giving it an enormous impulse. It seems now a matter of the utmost astonishment how mankind existed without it until the present century. The very progress of civilization seems now completely dependent upon it, and yet, as we have already said, it is but in its infancy. What may we not expect from its future development!

## ERRICKSON AND HIS MONITORS.

Soon after the breaking out of the present rebellion, the Government at Washington learned, from reliable sources, that the rebels were constructing an iron-clad war steamer at Norfolk—the same which subsequently made its appearance as the "Merrimack." It was well known that our navy possessed no ships which could successfully cope with this expected formidable monster. In this exigency, the genius of Errickson was at once called into exercise to devise a match for it. The result of his efforts was the celebrated "Monitor," which, by a most remarkable coincidence, arrived at Fortress Monroe but a few hours, only, after the dreaded Merrimack had made her appearance, and, by her destructive powers, spread consternation through the entire fleet of war ships and transports, in that vicinity. The result of the trial of strength which ensued has already passed into history, as one of the most remarkable naval engagements which has ever taken place, and has had the effect to completely revolutionize the art of naval warfare. Since that time numerous other Monitors, constructed upon precisely the same principles, have been put afloat, and subjected to the severest tests known to modern warfare. From the first, they have never failed to answer their purpose. The problem proposed to be solved by Mr. Errickson was the construction of a vessel, which should present to the enemy the smallest possible target, practically impenetrable, yet which should at the same time be able to throw such a weight of metal as would demolish any antagonist previously existing, or which could be constructed upon any other principle. The success of the effort has been most complete. A greater triumph of engineering skill has never been placed upon record in the world's history.

When the first Monitor was built, 11-inch guns were the heaviest known to the service. Practical artillerymen had no confidence in the possibility of constructing guns of any larger calibre, which could employ, with safety, sufficient powder to give the necessary momentum to the immense weight of their balls, required to make them effective. Capt. Errickson, in the first effort, succeeded in so shattering the Merrimack as to render her unfit for another encounter. But he was not satisfied. He proposed the use of 13 and 15-inch guns, in order to render his work more fully complete and speedy. Admiral Dalgren, chief of the Ordnance Bureau, earnestly remonstrated against the plan as impracticable; but Mr. Errickson, aided by Mr. Fox, the assistant but virtually the head of the Navy department, assumed the full responsibility of arming the monitors with 15-inch guns. The success of this still farther innovation on the previously established rules of engineering has been most triumphantly vindicated in the encounter between the Weekawken and the Atlanta, in which the latter most formidable craft was disabled and captured in fifteen minutes. The capacity of a Monitor to resist blows was most emphatically shown when the Weekawken lay for an hour before Fort Sumpter in the vortex of the most terrible artillery fire ever directed by the hand of man. The Weekawken is armed with two 15-inch guns only, with which she has proved herself to be the most formidable battery ever constructed, and as safe for practical use, as a common field battery. Had the original Monitor been armed with a gun of that caliber, the Merrimack would have gone to the bottom in less than ten minutes after the commencement of her fight.

**INCREASING THE PACIFIC NAVAL FORCE.**—The Government is making every effort for the speedy increase of the Pacific naval force. Fourteen hundred marines are being enlisted at New York city for two years' service on our coast.

## MINING—ANCIENT AND MODERN—IN THE HARTZ MOUNTAINS.

This celebrated Mining Region is a monopoly of the Crown of Hanover, and the shareholders of a mine—the virtual owners of the metal raised—must sell the same to the Government, at a price, which is usually from one fourth to a third below its actual commercial value. These mines contain some of the oldest workings known—dating back 2000 yrs. Ample written records still exist of operations carried on, seven and eight hundred years ago. Evidences of old Roman workings abound, in the frequent unearthing of bronze eagles and busts, known to have originated with that ancient people—mementoes that have come down to the present age from an era of civilization between which and ours has existed a night of ten centuries, during which the light of civilization and of arts had nigh become totally extinguished. The associations that cluster around these ancient workings are most strange and interesting, and bring forcibly to mind the Bible description of mining in the days of the ancient Jewish prophets. In these mountains are individual mines whose earliest workings date back five hundred years ago, and which still yield a plentiful supply of ore.

The location of the Hartz Mountains is quite isolated, and neither the people nor the general face of the country have undergone any material changes or modifications for centuries. Modern engineering science and the late improvements in mining machinery and smelting operations find very little favor with this peculiar people. Even the more enlightened classes, and those who fully appreciate modern improvements, are not in favor of any change in this particular case, from the fact that ample compensation therefor is supposed to be derived from the greater availability of labor among a people so stolid that not even the rush of the iron steed would avail to awaken them from their Rip-Van Winkle sleep of ages. Even the steam engine, that most powerful and effective of all modern appliances for the drainage of mines, and other purposes in that connection, is viewed with disfavor by this people, and, in a stubborn adherence to old usages, miles of tunnels are run at an incredible amount of labor to gain a few feet of drainage, when by a mere moiety of the expense, the same object and more, could be gained quite as effectually by pumping.

In no part of the world could steam be applied for drainage more effectually than here. The water does not flow into these mines from springs, even when carried to a very great depth, but enters by infiltration merely, and consequently at a very slow rate. The most wonderful and laborious excavations, in the way of adits for drainage, to be found in the world, exist in these mountains.

In the more ancient workings, the excavations appear to have been carried on with very little engineering skill, and consequently are very irregularly driven. Some of the ancient shafts reach to an enormous depth, and excite the utmost wonder as to the means employed in sinking them without the aid of gun-powder. That important modern invention is almost the only improvement over the ancient mode of working which has yet been introduced into these mines. The skill with which the older workings are secured, however, is a matter of admiration, even to the modern engineer.

These mountains contain almost all the minerals but coal, gold, silver, copper, lead and iron abound. The gold is found, as in this country, in veins of quartz, intermingled in various proportions with small quantities of the baser metals as in California. Auriferous pyrites occur in considerable quantity. The gold is occasionally visible to the naked eye, but not nearly as generally as here. Argentiferous copper abounds, but the silver which it contains is secured by a very laborious and expensive process. Silver ore is obtained here in considerable quantities, and is smelted by both the hot and cold blast.

**HORRORS OF WAR—LOSS OF LIFE.**—The present War of Rebellion, in this country, has been sanguinary enough to fill the whole land with mourning, and yet there have been wars far more destructive of life. It appears from the best historical testimony, that of one million two hundred thousand men enrolled in the armies of France in 1813, only 100,000 were alive in 1814, and that the loss of the Allied Powers in the wars with Napoleon was, according to the *London Times*, not less than, "ten million of men in the prime of life." France, in the same period, lost about six million.



## THE MINING SHARE MARKET.

The Mining Share Market, for the week just passed, has been exceedingly dull, in part owing to the general apathy which has prevailed for several previous weeks, but in a great measure in consequence of the general State Election in which this city has taken an unusual interest.

Burning Moscow, North American, Daney, Baltimore American and Sheba, have been largely dealt in. The two former at advancing rates and the three latter at a slight decline.

Ophir shares have declined somewhat in consequence of pretty definite information that the forthcoming dividend will not be increased.

Gould and Curry has advanced \$100 per foot.

Potosi has advanced to \$1,000, with fair demand.

Sierra Nevada, closed at \$90, a decline of about \$10.

Daney shares have met with a material decline, with large transactions. The decline is attributable to anticipated heavy assessments.

Belcher has been less dealt in than last week, but at somewhat improved rates.

Burning Moscow has met with a fair business at an advance of about \$20 per foot, but attended with considerable fluctuation.

Overman is still improving and closed at a large advance over last weeks figures.

Yellow Jacket closed at a slight depreciation from last weeks figures, having been in fair demand.

Wide West Shares have been sought after, and easily bought at \$115.

Real del Monte, is in favor with a few and has been sold at \$400; but little stock offered.

Utah, dull at \$5; Pond, at \$35; Falls of Clyde, \$5.

Sheba, Humboldt, has been more offered, and declined to \$120, after selling at \$160.

Uncle Sam, Gold Hill, fluctuating from \$82 to \$190, and closed at \$95, with a weak Market.

De Soto, but little enquired for.

We subjoin the principal sales of the week.

Ophir.....	72 Shares	\$2250	@ \$2300	per foot.
Potosi.....	28	1000	"	"
Best & Belcher.....	8	950	"	"
Sierra Nevada.....	108	90	@ 94	"
Daney.....	722	87½	@ 105	"
Burning Moscow.....	327	125	@ 145	"
Spanish No 2.....	50	42	@ 42½	"
Lucerne.....	15	26	"	"
Lady Bryan.....	86	11	@ 12½	"
Mt. Davidson.....	125	2½	@ 3	"
Charles Caney.....	78	22½	@ 30	"
Norton.....	30	4	@ 7	"
Burnside.....	160	6	@ 11	"
Adriatic.....	30	4	@ 4½	"
Iowa.....	20	75	@ 77½	"
Madison.....	17	18	"	"
Buckeye.....	89	35	@ 44	"
Pride of the West.....	4	80	"	"
Bullion (G. H.).....	12	77	@ 78	"
North American.....	977	60	@ 85	"
Baltimore American.....	171	47½	@ 56	"
Overman.....	38	460	@ 625	"
Imperial.....	5	477½	"	"
Yellow Jacket.....	54	1070	@ 1125	"
Cedar Hill Tunnel.....	25	2½	@ 2½	"
North Ophir.....	5	12	"	"
Wide West.....	112	112	@ 132½	"
Real del Monte.....	31	375	@ 400	"
Utah.....	47	55	@ 62½	"
Pond.....	30	35	@ 37	"
Falls of Clyde.....	55	5	@ 5½	"
Great Western Tun.....	50	1	"	"
Josephine.....	20	11½	"	"
Coso.....	40	7	"	"

## COPPER.

While holders of good copper stocks, such as represent mines already shipping ore in quantity, or those which are in a forward state of development, are firm in their prices, the stock of undeveloped mines are a drug in the market, and can with difficulty be sold at any price. But little

of the former is being offered; the impression being that stock in such mines is quite underrated in the market. The returns from foreign shipments which will soon begin to come in for various mines, but recently opened, and the result of the operations of the Smelting Works at Antioch, which will be heard from in the course of the present month, will, no doubt, soon exert an important influence upon copper stocks.

Considerable interest is being manifested in this new branch of California mining, in Eastern cities, particularly in Boston, where the press is devoting special attention to the subject. The large amount of ore already going forward and the encouraging prospects for the future give the earnest of early and full return freights, from this port. This important feature is being duly appreciated by our friends at the East.

A sale of a claim in the Lancha Plana Company, is reported the past week, as having taken place in Stockton, at 6,000 (claim 300 feet.) The Keystone is held in that market at \$130, with but a limited supply offered.

Reports from the Northern counties state that the location of copper claims is still going on as much as ever. The work of development is also progressing. The Union Company are taking out ore in considerable quantities, and preparing it for shipping. They will not send any forward until they have about 100 tons, as they intend to ship it to the East themselves. They have a considerable amount now ready for shipment.

There are as many as a dozen mines in Klamath and Humboldt counties that expect to be ready to ship ore very soon.

The Well Lead, in Nevada county are taking out large quantities of ore. They are sending the inferior qualities only to the smelting works at Antioch. They retain their first class ore at the mine for shipment to the East. They have a contract for the delivery of 1,000 tons of low grade ores.

The Last Chance has considerable rock out and will soon commence shipping.

The Burra Burra mine, two and one half miles south from the Well Lead, has a shaft down fifty-one feet with good indications—also a 14 foot drift. They have in the shaft a fine chimney, of small dimensions, but gradually opening out, of black oxide, from which some 150 lbs. have already been taken. The same presents a most promising indication of a strong lead of sulphurets, which they will doubtless strike soon.

## ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, Aug. 25, 1882.]

	Bid.	Asked		Bid	Ask
Alpine.....	\$4	10	Lilly Dale.....	20	35
Amador.....	2	5	Live Yacker.....	9	20
Arctic.....	2	5	Lodi Byron.....	7	18
Arcado.....	—	—	La Plata.....	8	12
Antelope.....	—	375	Main Esmeralda.....	25	30
Alturas.....	10	15	Monroe.....	10	40
Atina.....	5	—	McKinstry Tunnel Co.....	3½	10
Brazo.....	3	5	Monte Christo, Tunnel co.....	—	—
Bodie Bluff Consolidation.....	9	10	Mattum.....	—	—
Bodie Bluff, No. 1.....	3	10	North Willow Springs.....	—	—
Bodie Bluff, No. 2.....	16	—	New Esmeralda Consol.....	2	5
Bright Star.....	10	15	Newton.....	—	—
Bunker Hill.....	5½	10	Nevada (Tunnel).....	—	1000
Bonaparte, Tunnel comp.....	—	—	Ozark.....	—	—
Caucasian.....	11	—	Old Winnemucca.....	10	10
Chimney.....	150	200	Paul Tunnel Co.....	2	—
Crockett.....	—	—	Pacific.....	5	10
Cape.....	—	—	Pond.....	25	40
Cian Alpine.....	—	—	Pride of Antelope.....	8	—
Davis consolidation.....	—	—	Peto (two ft. to the share).....	8	10
Durgin.....	—	—	Pennsylvania Tunnel Co.....	10	—
Delta.....	15	—	Real del Monte.....	410	460
East Essex Ex. Ural.....	10	—	Rebecca.....	—	—
Excelsior, Excelsior Dist.....	15	20	Red, White & Blue.....	—	—
Empire.....	—	—	Stanford Tunnel Co.....	—	—
Franklin, Tunnel company.....	—	—	Schenectady.....	—	—
Fallstaff.....	—	—	Schroeder.....	—	—
Fallstaff Consolidation.....	4	6	Silver Hill, Bodie District.....	60	—
Fredon.....	3	6	Seymour.....	—	—
Falls of Clyde.....	—	—	St. Louis.....	10	—
Great East.....	1	—	Tuscan.....	—	—
General Hooker (Con.).....	25	30	Tiger.....	3	—
General Jackson.....	13½	14	Tucker.....	—	—
Garibaldi.....	—	40	Union Tunnel.....	10	30
Golden Harvest.....	—	5	Utah.....	10	10
Golden Fossil.....	20	25	Ural proper.....	165	185
Governor Seymour.....	—	—	Ural [extension].....	5	10
Golden Age.....	—	25	William Tell.....	—	—
Great Britain.....	—	—	Wide West.....	140	160
"Golden Era" Tunnel Co.....	—	—	Washington Tunnel comp.....	—	—
Greenback.....	12	25	Western Summit.....	—	—
Hanover.....	1	3	X Eliza and Constantine.....	—	—
Howard Tunnel Co.....	—	—	consolidated.....	1½	6
Herman Consolidation.....	12	—	Yancey.....	—	—
Herman Consolidation.....	15	—	Cortez, consolidated.....	—	—
Home Check, Excelsior Dis.....	—	5			
Juniata.....	—	—			
Keeney.....	—	—			

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending Sep. 5, 1883.

Names of Companies.	Total No. Shares.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHINGTON STOCKS.</b>									
Ophir.....	16,800	1	2300	—	2200	—	2200	2100	2250
Gould & Curry.....	4,300	4	600	4400	4500	—	4600	4600	4300
Savage.....	800	1	300	300	300	—	3100	2900	1000
Chollar.....	5,600	4	300	500	500	—	1000	800	900
Potosi.....	2,800	2	500	850	950	—	900	850	900
Hale & Norcross.....	800	2	600	1600	—	—	—	—	—
Sierra Nevada.....	3,000	1	500	950	—	—	—	—	—
Burning Moscow.....	4,800	2	100	120	132½	—	120	120	110
North Potosi.....	3,000	1	300	38	—	—	—	—	—
Mercedith.....	7,200	2	125	—	—	—	40	40	—
Charles Caney.....	1,800	1	30	25	24	—	21	22½	22
Sacramento.....	1,800	1	600	70	—	—	—	—	—
Iowa.....	—	—	—	—	—	—	—	—	—
El Dorado.....	—	—	—	—	—	—	—	—	—
Norton.....	1,600	1	—	4	3	—	—	—	—
Burnside.....	—	—	—	—	—	—	—	—	—
Adriatic.....	—	—	—	—	—	—	—	—	—
Brenous.....	—	—	—	—	—	—	—	—	—
Pride of the West.....	—	—	—	—	—	—	—	—	—
G. H. Quarz M. Co.....	—	—	—	—	—	—	—	—	—
Imperial.....	10,000	1	100	2½	—	—	—	—	—
Mount Davidson.....	10,000	1	200	3	—	—	—	—	—
Central.....	1,800	12	300	—	—	—	—	—	—
California.....	3,600	12	300	—	—	—	—	—	—
Rogers, F. D.....	2,000	1	250	—	—	—	—	—	—
Lucerne.....	1,800	1	100	—	—	—	—	—	—
Lady Bryan.....	5,000	1	500	—	—	—	—	—	—
La Grasse.....	—	—	—	—	—	—	—	—	—
Moss.....	—	—	—	—	—	—	—	—	—
Porter.....	—	—	—	—	—	—	—	—	—
Crown Point.....	—	—	—	—	—	—	—	—	—
Manhattan.....	—	—	—	—	—	—	—	—	—
Hudson.....	—	—	—	—	—	—	—	—	—
Lady Ellen.....	—	—	—	—	—	—	—	—	—
Scholar.....	—	—	—	—	—	—	—	—	—
<b>ESMERALDA STOCKS.</b>									
Wide West.....	2,600	1	600	125	110	—	116	105	116
Antelope.....	1,200	1	500	—	150	—	—	150	160
Esmeralda.....	1,600	1	1000	27½	28	—	—	—	—
Real del Monte.....	4,400	1	400	350	350	—	350	—	360
Utah.....	1,800	—	250	63	62½	—	55	—	50
Silver Hill.....	3,000	1	500	26	25	—	25	26	26
Nevada.....	1,200	—	250	—	—	—	—	—	13
Federal Hope.....	—	—	—	—	—	—	—	—	—
South Utah.....	—	—	—	—	—	—	—	—	—
Jenny Lind.....	—	—	—	—	—	—	—	—	—
Falls of Clyde.....	—	—	—	—	—	—	—	—	—
Sunbeam, S. W. ex.....	—	—	—	—	—	—	—	—	—
Bamboo.....	600	—	500	—	—	—	—	—	—
Great West Tun.....	—	—	—	—	—	—	—	—	—
Burlington.....	—	—	—	—	—	—	—	—	—
El Paso.....	—	—	—	—	—	—	—	—	—
Crockett.....	—	—	—	—	—	—	—	—	—
Atina.....	1,200	1	100	—	—	—	—	—	—
<b>COSO STOCKS.</b>									
Josephine.....	4,800	2	250	9	10	—	—	11½	—
William Springs.....	2,700	1	100	5½	—	—	5	6	5
Empire.....	1,600	—	600	5	—	—	6½	6	5
<b>MEXICAN MINES.</b>									
Mina Prieta.....	2,200	—	1000	—	—	—	—	—	—
Dios Padre.....	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon.....	2,700	1	600	40	—	—	—	—	—
Josephine.....	—	—	—	—	—	—	—	—	—
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill.....	—	—	—	—	—	—	—	3	—
Rhodes Diggings.....	—	—	—	—	—	—	—	—	—
Eureka.....	—	—	—	—	—	—	—	—	—
Fellowes.....	—	—	—	—	—	—	—	85	85
Rock River.....	—	—	—	—	—	—	—	—	—
Hutchinson.....	—	—	—	—	—	—	—	—	—
<b>HUMBOLDT STOCKS.</b>									
De Soto.....	—	—	—	—	—	—	—	—	—
Great Basin.....	—	—	—	—	—	—	—	—	—

## CURRENT OF THE NIAGARA FALLS.

The immense force of the current in Niagara river, near the suspension bridge, is strikingly illustrated by one or two facts related by a gentleman who attempted to sound the river at that point. We may remark here that the current is so strong that the river cannot be sounded at that point, and probably never will. The attempt referred to was made with an iron of about ten pounds weight, and attached to a No. 11 wire, all freely suspended, so as not to impede the fall of the weight. The experimenter says: "I let the weight fall from the bridge, at the height of two hundred and twenty-five feet. It struck the surface fairly, with the point down, and must have sunk to some depth, but was no longer out of sight than a second, when it made its appearance again on surface, about one hundred feet down the stream, and skipped along like a chip until it was checked by the wire. We then commenced hauling in slowly, which made the iron bounce like a ball, when a cake of ice struck it and ended our sport. I am satisfied that no metal has sufficient specific gravity to pierce that current, even with a momentum acquired by a fall of two hundred and twenty-five feet. The velocity of the iron, when striking, must have been equal to one hundred and twenty-four feet per second, and consequently its momentum was near five thousand pounds. Its surface opposed to the current was fifty superficial inches. This will give an idea of the strength of that current, and at the same time hint at the Titan forces that have been at work



## REESE RIVER MINES.

Reports of a most favorable character continue to reach us from the Reese River Mines. Probably no section of our widely extended mining region is attracting so much attention at the present time as this.

Some idea of the rush to this region may be formed from the following item clipped from the Reese River correspondence of a city contemporary, writing under date of Aug. 17, 1863:—

Of the countless number of gold and silver mines supposed to exist, not yet discovered, in that vast region of country comprised between the Rocky Mountains and the Pacific, few regions or districts seem to be attracting so much attention and causing such excitement as that of Reese River, the mining headquarters of which is Austin. One of the great troubles here seems to be the want of additional stage facilities to accommodate the rush of persons coming to this country. Notwithstanding that the Overland Mail Company, which employs over 200 stages and innumerable horses and mules, on a line 1,915 miles in length, running directly through this town, where they land from six to twelve passengers daily, there is seldom a day when the stages leave Virginia City at there are not from three to six passengers left behind. To secure a passage on any particular day, it is necessary to register one's name three or four days in advance.

Eleven four-ox teams laden with machinery for Reese River, passed through Dayton August 27.

The Virginia City *Enterprise* of August 23d contains the following item:—

There is on exhibition at Lewis & Spaulding's saloon, under the International Hotel, twenty specimen bricks of bullion from the Reese River mines, produced from the following claims: From three tons of the Florida claim, from unassorted rock, \$2,573; from ten tons of the Morgan & Murry claim, unassorted rock, \$3,181 40, from two tons of the North Star rock, unassorted, \$554. The above rock was worked through the mill of Messrs. Buel & Co., at Austin. Two more mills will be in operation in Austin, in about a week.

The *Farmer* of this city, of Saturday last, says that a quantity of ore recently brought down from the Dacotah Ledge, a-sayed by G. W. Bell, yielded \$4,991 50 to the ton.

A recent crushing of two and a half tons of rock from the North Star ledge, at Buell's Mill, in Austin, yielded \$500. The crushing of 2½ tons from the Florida ledge at the same mill yielded \$1980.

## 50 lbs. MARINE and Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

## DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

## 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

## DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.  
ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
G. T. Forquz, Superintendent.

WORKS, North Beach; Office, 509 Sacramento st., San Francisco.

## GENERAL NOTICES.

DR. H. AUSTIN,  
DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

**DESKS**  
AND  
**Office Furniture,**  
OF ALL KINDS... FOR SALE BY  
**JOHN WIGMORE,**  
No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBING, of all kinds, attended to.

## SQUARZA'S PUNCH.

FIRST PREMIUM  
AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.

ALSO; FIRST PREMIUM  
At the San Francisco Bay District Agricultural Fair, 1862  
MANUFACTORY, WHOLESALE AND RETAIL,  
No. 44 Leidesdorff street,  
Opposite the What Cheer House, San Francisco.

**CHARLES GEDDES,**  
**ARCHITECT,**  
Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms.  
Jy 20 San Francisco

**FREDERICK MANSELL,**  
**MECHANICAL & ARCHITECTURAL**  
**DRAFTSMAN,**  
No. 422 California street, corner of Leidesdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar 23 2m

## New Patent Agency.

WE HAVE CONNECTED WITH THE  
Publication of the "Mining and Scientific Press"

## The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

Mining and Scientific Press Agency  
the most desirable place to make application for Letters Patent on the Pacific coast. Apply at  
Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Government House. EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

## PATENT RIGHTS.

Patent Rights Bought and Sold,  
At the office of the "Mining and Scientific Press" Agency  
EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

## Offices To Let,

In the Government House, Corner of Washington and Sansome Streets. Two large suits of Offices, the most commodious and accessible in the city. C. A. CRANE, Proprietor

## GENERAL NOTICES.

## HAYNES &amp; LAWTON,

IMPORTERS AND DEALERS IN

**CROCKERY,**  
**GLASS WARE,**  
**FRENCH CHINA,**

Coal Oil Lamps, Table Cutlery  
**CLOCKS,**  
Silver Plated and Britannia Ware,  
ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCHANT,]  
SAN FRANCISCO.

## WHEELER'S Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* These Pans have been in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. 2016-1f ZENAS WHEELER.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,  
CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,  
SAN FRANCISCO.

## REMOVAL.

OFFICE OF THE PACIFIC METAL  
lurgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced to cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

## NATHANIEL GRAY,

General Furnishing Undertaker,  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

GEOR. A. METCALF.

D. S. HUTCHINSON.

## METCALF & HUTCHINSON'S PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below  
Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

## CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

**\$3. Per Dozen!**

Large sized Photographs \$3—Extra copies \$1 each.  
AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.  
Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

## HOTELS.

**International Hotel,**  
JACKSON STREET, ----- SAN FRANCISCO  
[A few doors above Montgomery.]

**FIRE-PROOF BRICK BUILDING.**  
Most convenient to the  
Steamer's Landing, Business etc. & Places of Amusement  
**OPEN ALL NIGHT.**  
City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop  
Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**  
and SETS AS GOOD A TABLE as any House in the City. I am determined that the International shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

**Tremont House,**  
418 and 420 ----- Jackson Street,  
[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,  
WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL.  
F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurbished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, Free.  
F. E. WEYGANT.

## THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.

H. T. FELTON - - - - W. C. MINOR,  
PROPRIETORS.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House Free of Charge.

The House is open all night.

## P. M. S. C. O.

PACIFIC MAIL STEAMSHIP COMPANY'S  
line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of September, 1863.

Sept. 13th, - - - - Steamer Orizaba.

Sept., 23d, - - - - Steamer Golden Age.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.  
And connect via Panama Railroad, at Aspinwall, with teams for New York.  
For Freight or passage, apply to

A. B. FORBES, Agent.  
Jed Corner of Sacramento and Leidesdorff sts.



FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

**REYNOLDS' Patent Cut-Off and Governor, FOR STEAM ENGINES.**

127 of these Invaluable Machines, ARE NOW IN USE In California and Nevada Territory, giving a perfectly regular motion and Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor** Is the CHEAPEST, SIMPLEST and QUICKEST to act and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

**Clark's Steam and Fire Regulator,** For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to point, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

**Ingersoll's Patent Drill Press,** With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

**Felt for Steam Boilers, Pipes, Etc.** At the lowest market rates.

**Steam Engines, Boilers, Pipes,** Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

**Anti Incrustation Powder,** A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past Eight years. Refer to—Sugar Refinery, San Francisco, Cottrell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States. E. T. STEEN AGENT. No. 33 Fremont Street, San Francisco.

**EXCELSIOR IRON WORKS,** 712 Sansome street, Between Jackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,** Manufacturers of all kinds of Architectural and Ornamental Iron Work, Bank and Store Vaults, Safes, Doors, Shutters, Balcony, Area and Cemetery Railings, Gates, Stairs, Etc., and all kinds of Blacksmithing and Jobbing done with promptness, and at Reasonable Prices. Orders from the country promptly attended to. je13

**FULTON FOUNDRY & IRON WORKS** HINCKLEY & CO., MANUFACTURERS OF Steam Engines QUARTZ, FLOUR AND SAW MILLS; CAST IRON FRONTS, FOR BUILDINGS, MINING PUMPS, AND ALL KINDS OF MACHINERY, ETC., FIRST STREET, BETWEEN MARKET AND MISSION.....SAN FRANCISCO.

\*All kinds of IRON AND BRASS CASTINGS furnished at short notice. Every style of FINISHING to Iron when cast. Repairing of Machinery neatly done. PATTERNS MADE in all its various forms. Prices low. D. B. HINCKLEY. WM. E. WORTH. WM. A. FIELD.

**MOYNIHAN & AITKEN,** Boiler Makers and Blacksmiths, Mission, between Beal & Fremont Sts, San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms. July 29

**PUMPS!** HARRISON'S California Lift and Force Pump, WITHOUT VALVES OR PACKING, Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented. ALL SIZES; Capable of throwing from ONE HUNDRED to FIVE THOUSAND Gallons per Minute—For sale by C. H. HARRISON, PHOENIX OIL WORKS, 517 Front Street, San Francisco, je15

**PALMER, HANSCOM & CO., GOLDEN STATE IRON WORKS,** No. 10, First Street, San Francisco, Furnish Castings and Machinery of all kinds

ALSO: GENUINE WHITE IRON SHOES AND DIES. PALMER, HANSCOM & CO.

**To Quartz Miners.** Knox's Improved AMALGAMATING PAN, WITH PALMER'S PATENT STEAM CHIEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known. By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the cutting of floating gold and silver, known to be other wise lost. Made exclusively by PALMER, HANSCOM & CO., GOLDEN STATE IRON WORKS, Nos. 10 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. W. A. PALMER.

JOHN P. GALLAGHER.....JOSEPH H. WOOD. GALLAGHER & WOOD, BRASS & BELL FOUNDRY AND LOCK FACTORY.

No. 125 First Street, opposite Mills, next door to Pacific Foundry, all kinds of Brass and Composition Castings and Finishing, done with neatness and dispatch. CHURCH AND STEAMBOAT BELLS, OF ALL SIZES Made to order. Engine, Gongs made and hung in the best manner. Bank, Vault, Store and Prison Locks, also brass Padlocks and Shop Locks of various patterns, on hand and made to order. \$3. Particular attention given to casting Rudder Braces and Ship Work in general. All Jobs promptly attended to.—Prices moderate. Removed from Oregon street, between Front and Davis.

**Miners' Foundry** —AND— MACHINE WORKS, First St., between Howard & Folsom, SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the State of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as: Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition. \*Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere. HOWLAND, ANGEL & KING San Francisco, February 23, 1863.

**San Francisco Machine** ....AND.... IRON WORKS! Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON most reasonable terms. Steam Engines, High and Low Pressure; Quartz mills, Saw mills, Mining Pumps, Hoisting machines for mining purposes, Wine Presses, Agricultural implements etc. etc., and Castings of all descriptions made to order. Steam Engines exchanged and for sale. DEVORE, DINSMORE & CO. REPAIRING promptly attended to, FOR SALE. One Upright Post Drill, Putnam's manufacture, All so one thirty-inch screw Chuck. San Francisco, July, 1863. je13

**VULCAN IRON WORKS COMPANY** P. Torquet, Manager, STEAM ENGINE BUILDERS and BOILER MAKERS, Iron Founders and General Engineers, No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing Machinery. Shoes and Dies of the hardest iron, Russia Iron Punched Screens. Steamboat Machinery: Saw, Flour and Sugar Mills. High and Low Pressure Boilers of all Styles. JONVAL and other Turbine Water Wheels with latest improvements.

**W. T. & J. GARRATT,** City Brass and Bell Founders Cor. First & Market sts., San Francisco.

BABMET METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints. Gauge cocks, Cylinder cocks, Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS OF ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."

**D. MORRIS, MACHINE SHOP,** 227 Market, corner of Beale Street.

Manufacturer of WARRANTED FIRE-PROOF SAFES Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. je13

**LEWIS COFFEY AND RISDON,** STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality. Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal. LEWIS COFFEY J. N. RISDON.

**THEODOR KALLENBERG** Maker of Models FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing-stamps. Repairing of Machinery promptly attended to. No. 418 Market street, San Francisco. n7.3m

**HIRAM WRIGHT, PICK MAKER,**

Has established a Manufactory for the Making of MINER'S PICKS, at NO. 121 POST STREET, SAN FRANCISCO, [Between Montgomery and Sansome.] WHERE can be had a superior Pick for Miners use As he manufactures all his picks under his own personal supervision, he warrants them as being made of the best material and by the best workmanship. Orders attended to and filled promptly and with dispatch. aug17

**WRIGHT'S PICKS.**

JOHN WRIGHT, of Sacramento, has established himself in San Francisco, for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

**CALIFORNIA TOOL WORKS!** John Weichhart, Manufacturer of All Kinds of Edge Tools, Etc., Plane Irons Moulding Irons, Stone Cutter's Tools, etc No. 22 Fremont street, bet Market and Mission, San Francisco, July 14, 1863. jy 20

A PARISIAN inventor has off red to the Polish Committee a new sort of fulminant, which will explode after being an hour under water. These bombs can be made in the midst of the woods, with ordinary materials, and at low price, and it is said that many persons might be injured by a single discharge.

A New London man has invented a weapon that may be inserted in the handle of a lady's parasol, and will drive a ball through an inch and a half plank at the distance of ten rods.

A BRITISH officer has invented a new rifle ball, charged with solid phosphorus.—When lodged in any object it burns with great fierceness for some time.

ANOTHER FALL AT NIAGARA.—The St. Catherine's Journal says that on Saturday night, the 18th of July, with a sound louder than the discharge of a park of artillery, a large section of the rock on the north Canada side of Niagara Falls, near Mr. Davis's Table Rock Hotel, fell into the yawning abyss below, giving the Falls on that side a more decided horse-shoe appearance than they had before.

**Eye, Ear and Throat.** DR. DE CASTRO, Oculist and Aurist,

WHO HAS PRACTISED IN NEW York and all the principal cities of Europe, with such unrivalled success, and from each place in possession of the most eminent testimonials, may now be consulted upon diseases of these delicate organs, with a view to their permanent cure. Deafness of long standing thoroughly cured. The Doctor employs his (by the Medical Society of London approved)

**Self-adjusting Artificial Tympanum,**

For the relief of deafness, attended by loss or injury to the membrana tympani, and for the cure of discharge from the ear—the invention of Dr. Castro, M. D., author of "Deafness Practically Illustrated as to its Nature and Treatment," etc. The self-adjusting Artificial Tympanum was first introduced to the notice of the profession at the meeting of the Medical Society of London, on the 20th of November, 1863. An animated discussion ensued on the reading of the paper, and several members of the Society bore testimony to the success of the remedy and the importance of the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-Adjusting Artificial Tympanum, as he had observed the immense benefit a young lady friend of his had received from it. She was in fact, quite deaf, and in a most miserable state; the effect of the tympanum was instantaneous—quite like a miracle. Five more testimonials from Members of the Medical College, New York, and the principal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and Kearny streets. Entrance on Market street.

Mr. Editor—Having been afflicted with deafness for the last two years, originating from a severe cold, and for the last month suffering from the most excruciating pains in my ear, I was obliged to come down to San Francisco to seek relief. After a physician's recommendation to wait on Dr. De Castro, on the corner of Kearny and Market streets, and underwent one operation, and it is with the utmost pleasure I can say my hearing was suddenly and without pain entirely restored. I deem it my duty to make this known to the public, and to recommend Dr. De Castro's skill as an aurist. JOHN REESE, Napa Valley.

James Callaghan, witness. San Francisco, July 30th, 1863.

[From the Daily Alta.] San Francisco, June 30th., 1863.

ED'S DAILY ALTA: Permit me through your widely circulated journal, to say, that my daughter Mary Ellen, has been afflicted with deafness since she was thirteen months old, and that she has been a member of the Deaf and Dumb Institute since it was organized. On taking her to Dr. De Castro, on the corner of Kearny and Market Streets, and undergoing under his direction, two operations, she has heard sounds very distinctly; and is now, I am happy to state in a fair way to get permanent relief. The result, thus far, is satisfactory; and I deem this notice due to Dr. De Castro for his skill; and would recommend all parties similarly afflicted to give him a trial. My daughter has at different times been under the care of the most skillful physicians and aurists in California, but up to the period of visiting Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT, 812 Green Street.

**APARTMENTS.**

FURNISHED APARTMENTS, WITH, OR WITHOUT Board, at 1018 Powell Street, between Clay and Washington street. Persons desirous of a respectable home will do well to apply. jy6



## MINING NOTICES.

**Winona Gold and Silver Mining Company.**—The first annual meeting of the stockholders of the Winona Gold and Silver Mining Company, will be held at the Company's office, No. 428 Montgomery street, for the election of five Trustees for the ensuing year, on the 19th day of September, 1863, at 7 1/2 P. M. By order of the Board of Trustees. M. G. ELMORE, Sec'y. aug24

**Red Jacket Mining Company.**—At a meeting of the Board of Trustees of the above company held July 7, 1863, the first assessment of Five Cents per share on the capital stock was levied, payable immediately in United States gold coin, to the Secretary, office 429 Montgomery street, Room No. 2. By order of the Board. J. W. CROSLY, Secretary. aug24

**Office Table Mountain Copper Mining Company.**—At a meeting of the Board of Trustees of this Company, held July 25, 1863, an assessment of Thirty Cents per share was levied upon the capital stock of said Company, payable immediately in United States gold coin to the Secretary, at the office of the Company, No. 628 Montgomery street, or to J. M. Pike, Superintendent, at Copperopolis. M. G. ELMORE, Secretary. aug24

**Grey Ledge Gold and Silver Mining Company.** Office No. 528 Montgomery street, San Francisco. All stock on which assessment is not paid will be advertised as delinquent on the TWENTY-FOURTH DAY OF AUGUST. M. G. ELMORE, Secretary. aug24

**Office of the Niagara Consolidated Gold and Silver Mining Company.** Eldorado Canon.—Notice is hereby given that the Board of Trustees have this day levied an assessment of Twenty-five Cents per share upon each and every share of the capital stock of the said Company, payable in U. S. gold coin immediately to the Secretary, at the office of the Company, No. 528 Montgomery street, or to the Contractor at the Canon. M. G. ELMORE, Secretary. aug24

## RIEHN, HEMME & CO., ASSAYERS.

Office, Montgomery street, cor. of California,  
OPPOSITE WELLS, FARGO & CO.  
**Assays Made of ores, Minerals  
and Metals.**

REFERRED WITH PERMISSION TO  
Messrs. F. PARROT & CO., [Messrs. ALSOP & CO.,  
R. B. SWAIN, Esq., [DONOHUE, RALSTON & CO.

CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in Assaying, also in Mineralogy and Chemistry as far as required to become a practical Assayer.

## THE EUROPEAN ORE REFINING COMPANY.

Quartz Mill and Furnaces, Bryant Street,  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF  
**ORES AND MINERALS.**

In large or small quantities, for such Experienced Treatment by the

**LATEST EUROPEAN METHODS,**

As may be ascertained by

**CAREFUL ANALYSIS,**

At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.

333-The South Park, and Polson and Kearny streets Cars pass Bryant street. au31

El Paso District, Los Angeles County,  
**MINING AGENCY.**  
C. W. TAPPAN, GENERAL AGENT,  
"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

LETTERS OF EXCHARGE, containing Revenue or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to. The subscriber has a carefully prepared map of all the lodes in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to J. Burnett, Esq., 435 Davis St., San Francisco Cal. El Paso, June 21, 1863. C. W. TAPPAN. au31

**WANTED,  
GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,**

By FRONTER A. DEVIERCY,

au31

437 Pine street, San Francisco.

## MINING CARDS.

**ALEXANDER STOTT,  
MINING SECRETARY,**  
512 Sansome Street, San Francisco.

Secretary of—

HORSESHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
PIGARO, Gold and Silver, Alpine District. au10

**T. C. Sanborn & Co.  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.**

**OPHIR SILVER MINING STOCK,**

**GOULD & CURRY MINING STOCK,**

**CHOLLAR MINING STOCK,**

**CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.**

J. F. MILLER.

W. C. COLEY.

**MILLER & COLEY,  
Stock Brokers & Mining Agents  
327 MONTGOMERY STREET,**

Between California and Pine, in Jerome Rice & Co's Real Estate Sales Rooms, San Francisco.

**ALL KINDS OF STOCK AND MINING  
Business attended to with Promptness  
and Dispatch**

aug17

**L. F. LELAND,  
STOCK BROKER,  
No. 621 Clay street,**

Office Hours, 10 to 11, A. M.; 2 1/2 to 3 1/2, P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY  
**PEASE, BOWLEY & CO.,  
Real Estate, Stock and Exchange  
BROKERS,  
621 Montgomery street, San Francisco.**

**LEGAL TENDER NOTES AND MINING STOCKS,  
BOUGHT & SOLD.**  
je-29

## AGENCY

For the Purchase and Sale of

**MEXICAN MINING STOCKS**

At No. 411 Clay Street, San Francisco.

**OFFICE OF THE PENA AND LA MARRONENA SILVER MINING COMPANIES, San Antonio District, Lower California.**

All persons are invited to call and examine Ores from the above mines. je13

Wm. FAULKNER.

**New Bedford Copper Company.**

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

**SHEATHING COPPER;**

**BRAZIER'S COPPER;**

**COPPER BOLTS;**

**YELLOW SHEATHING METAL;**

**COPPER AND COMPOSITION NAILS;**

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

MORGAN, STONE & Co  
je-29 108 Front Street, San Francisco.

**R. W. FISHBOURNE,  
PRACTICAL LITHOGRAPHER,  
ENGRAVER AND PRINTER,**

**NO. 539 CLAY ST., CORNER OF LEIDSDORFF,**  
San Francisco. State and County Bonds, Stock Certificates, Bills of Exchange, Bills of Lading, Bank Checks, Landscapes, Architectural and Marine Views Show Cards, Labels, Etc, executed with neatness and dispatch. N. B. All orders in Crayon Work promptly attended to.

## MINING.

N. B. Mining Stock Certificates executed with promptness and dispatch, and at greatly reduced rates. jy6

**MYERS & DAGGETT'S**

**Mining and Stock Exchange,  
No. 23 1/2 B Street, Virginia City, N. T.**

**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* Abstracts of Titles Furnished, Etc.

## BUSINESS CARDS.

**Napoleon Copper Mining Company.**

**Capital Stock.....\$1,620,000.  
2,700 Shares—\$600 Per Share.**

Length of Lead **2,700 Feet**; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACRELLISH  
Secretary.....R. C. ALLEN  
Treasurer.....R. G. BROWN  
Superintendent.....A. W. HASKELL

### TRUSTEES.

F. MACRELLISH, of Alta California  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncane & Co.  
R. C. ALLEN, U. S. Commissary Department,  
W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je29

**The Pacific Mineral Company**

**MAKE LIBERAL ADVANCES UPON THE ORES OF**

**COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,**

**LEAD, AND SULPHURITES CONTAINING GOLD.**

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such lands are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-tf Montgomery Street, San Francisco.

**MARTIN & Co.,**

OFFICE—324 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

**Purchase of Copper Ores'**

Assaying 8 per cent and upwards of Copper to the Ton. We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Stock will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York, San Francisco.  
San Francisco Post Office, Box 1259.  
je 1.

**To Mining Companies about to Incorporate.**

JOHN ARMSTRONG,  
CONVEYANCER,  
610 Merchant Street,  
San Francisco.

Is Prepared to draw with Accuracy and Dispatch, Certificates of Incorporation—Trust Deeds, and all other Papers, necessary to the correct Incorporation of Mining Companies, on reasonable terms. All letters of enquiry cheerfully and promptly answered. Address as above. jy27

**TO MINING COMPANIES!**

**Offices To Let.  
SUITES OR SINGLE ROOMS,**

IN

**Government Block,**

N. W. Cor. of Sansome and Washington sts.

au-24

**San Antonio Gold and Silver Mines,  
LOWER CALIFORNIA,**

**FORWARDING & MINING AGENCY.**

**SAMUEL SMITH,**

OFFICE—North West Corner of Front and Clay Streets, San Francisco.

**MINING MACHINERY AND MERCHANDISE FOR-  
warded.** Mining Claims secured, through the resident Agent at San Antonio, and information furnished regarding any claim, in that Territory, on Commission. je-26

**H. C. KIBBE,  
MINING SECRETARY,  
Commissioner for Nevada Territory,  
543 Sacramento st., cor. Montgomery  
(ARMORY HALL.)**

## BUSINESS CARDS.

**SOUTH PARK.**

**Quartz Mill and Reduction Works**

**GOLD AND SILVER ORES WORKED AT REASON-  
able rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.**

Office in Shiel's Block, opposite Masonic Temple.  
je13 J. H. SMITH & CO.  
S. F. CLOUSER, Secretary.

**W. W. HANSCOM,  
Steam and Mechanical Engineer,**

Designs furnished, and Drawings made for  
Engines, Mills, Water Wheels, Mining Ma-  
chinery, etc., etc.,  
At Golden State Iron Works,

aug 3 First Street, San Francisco.

**To Mining Companies.**

**FOR SALE—A STEAM ENGINE AND BOILER.** TH  
Engine is 30 horse power—10 inch cylinder—2  
inch stroke—solid iron frame, with heater, pumps, etc  
all complete. The boiler has 5 flues, is 24 feet long, 4  
inches in diameter, made up from the best three-eight  
inch Low Moor iron, and weighs about 5000 pounds.  
Both Engine and Boiler are in perfect order and full  
guaranteed. Apply to

I. H. HAM, No. 211 Clay st.  
San Francisco, June 13, 1863. '8t

**MINING CERTIFICATE LOST!**

Certificate for Ten Shares, No. 33, dated July  
8th., 1863, of Tamplias Gold and Silver Mining Company.  
The finder will be suitably rewarded by leaving it in  
room 24, Government Block.

LOUIS EDWARDS.

**MINING & SCIENTIFIC PRESS.**

**THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.**

**THIRD YEAR! VOLUME VI.—NEW SERIES**

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits together with several original engravings of new inventions, etc., prepared expressly for its columns. This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

**The Mining Interest!**

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to the purpose, and of everything generally that may be of service to the Miner.

**The Inventor!**

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietors having had great experience as Patent Agents, together with facilities at Washington that enable them to obtain Patent with dispatch.

**The Mechanic and Manufacturer!**

Will be greatly benefitted by its personal, as its columns will from time to time contain original engravings of new machines and inventions, together with large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

**To Chemists, Architects and Millwrights!**  
This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

### Terms.

To mail subscribers—Four Dollars per annum  
**Club Rates.**  
Five Copies for Six Months, \$26.  
Ten Copies for Six Months, \$46.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.  
For all clubs of Twenty and over, the yearly subscription is only \$2 80. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to many parts of the country.  
**EVER & SMITH, Publishers,**  
Room 67, Government House, Corner of Washington and Sansome streets, San Francisco.



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, SEPTEMBER 14, 1863. NO. 46.

## REMOVAL.

The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing more room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.

## DEODORIZING COAL OIL.

A Patent has been taken out by a London chemist for a method of removing the offensive odor from coal oils. This desirable object is effected by means of nitrous acid in combination with shreds of iron, and the gas so formed is caused to pass into the bottom of any vessel containing petroleum, until the entire mass is completely saturated, when the vessel containing the oil is closed, until, by testing, the samples are found to be free from any offensive odor. This deodorizing process is also capable of being applied to the oil in connection with the process of distillation; so that the oil may be introduced directly from its crude state into an engine or boiler. The invention is a very important one, and the universal application of its use must render its use universal in the manufacture of coal oils.

**DIRECTIONS FOR USING KEROSENE LAMPS.**—The Board of Health of Brussels give the following, among other directions, about the proper care and mode of using kerosene or petroleum lamps:

"The lamp should always be kept hermetically closed, for whenever there is an opening that admits a direct communication between the oil-holding receptacle and the flame the lamp ought not to be used, as an explosion may ensue. The receptacle may contain more petroleum than is sufficient for one burning, and should be made of glass or other transparent material, so that the quantity of liquid in it may be easily ascertained. The foot of the lamp ought to be broad and heavily weighted, so as to give it greater stability, and prevent its being easily upset. Care should be taken, before lighting the lamp, to see that there is a sufficiency of petroleum in the receptacle, and should it, nevertheless, be consumed earlier than expected or required, the flame must be first extinguished, and time allowed for the lamp to cool, before refilling and lighting it again.

**GOLD POCKET.**—The Pacific Company at Grass Valley, have struck a pocket in their quartz lead of almost pure gold on Monday August 28th, from which about \$17,000 were taken in a few hours. The gold was clean enough to take to town at once, without going through the ordinary process.

**A REGULAR EXPRESS** has been started between Aurora City and Owen's River. It must prove of great convenience to parties at either end of the route.

**HUMBOLDT SALT.**—The salt company's workmen have come upon a bed of salt, in the marsh, white as any table salt, and particles, crushed in the fingers, crumbling out as fine. It requires no grinding.

## THE BEAUTIFUL SKY.

It is strange how little people in general think or know about the beautiful sky over their heads. It is the part of creation in which Nature has done more to please and benefit man than in all things else. In no other work do we see the hand of a great and all-wise Creator so unmistakably displayed. The beautiful sky seems to be spread out like a great book in which man, in all conditions, whether civilized or savage, may read, as in letters of fire, "the hand that made it is Divine." In no other work of God is the beautiful and useful so intimately blended. The great essential purpose of the sky might have been accomplished by the sudden condensation of a great black rain cloud, once a week or so, which might have been emptied of its waters for irrigating purposes, and then a blank colorless waste have continued until the next fall of water was needed. But not so did the Almighty purpose when he made the firmament, and "divided the waters which were under the firmament from the waters which were above the firmament." Instead of such dreary monotony there is not a moment of time in which the great book over our heads is not changing its face. Page after page passes before us, beauty after beauty, picture after picture sweeps across the sky in a never ending series of exquisite glory—the Creator talking to his creature, teaching him to look up from the groveling scenes of earth, and to read in the beautiful sky the lesson of immortality and life beyond the grave!

The reason why, in a clear atmosphere, the sky is blue, is thus philosophically accounted for:

The white light of the sun falls upon the earth without change; it is then reflected back by the earth, and as it passes through the atmosphere portions of it are returned, and this double reflection produces a polarized condition of light, which imparts to the vision the sensation of a delicate blue. What is meant by polarized light is, that light which has been subject to a compound refraction, and which, after polarization, exhibits a new series of phenomena, differing materially from those that pertain to the primary conditions of light.

**AMERICAN MECHANICS IN FRANCE.**—One of the most extensive India Rubber Factories in France is located about three hours ride from Paris: was built by the father of Louis Philippe and employs from 600 to 700 hands. The establishment is now owned by a corporation. The most interesting (to Americans) circumstance connected with it is the fact that three American mechanics hold the chief places of superintendency in this great French Institution. This is a fact which speaks eloquently in favor of the superior mechanical skill of our countrymen.

**MARS LIKE THE EARTH.**—Recent examinations of the planet Mars, show it to be very similar to our globe. Snow is seen at both poles, the white circle increasing in winter and decreasing in summer. A greenish belt, with bay and inlets, is at the equator, supposed to be a sea and a redish island in that sea has been detected. The heat and light of the sun are only half what they are on the globe; but this may be compensated by a difference of atmosphere in their favor. The gradual appearance and disappearance of snow would seem to favor that idea.

## RICH QUARTZ IN CARIBOO.

The steamer Brother Jonathan which arrived from Victoria on Monday brought down a large amount of treasure and most encouraging reports with regard to the yield of the mines in Cariboo. The amount of gold dust by this arrival is about \$440,000, 135,000 of which was from Oregon. About \$200,000 of this amount belonged to three miners from Cariboo. These men employed last year about 20 men in opening their mine, and began to take out gold in January last, taking out in a single day as high as 108 pounds, but averaging per day 100 ounces. They deposited their treasure in the Mint.

The reports from Cariboo are very interesting. Much excitement had been caused by the discovery of rich auriferous quartz veins. A correspondent of the British Colonist, says on this subject:

Within the last few days some very promising veins of rich quartz have been discovered. All of these discoveries though undoubtedly rich and extensive have been almost totally eclipsed by a discovery made yesterday. Joseph Pearce, an Englishman, lost some of the horses of his pack train about two days ago. While searching for them, he found a vein of white quartz, about two miles from Richfield. He worked at the vein for two days, cleaning off the moss and vegetable mould, and the result of his labor was the discovery of one of the richest lodes of quartz that has ever been seen. The specimens taken from the ledge are studded with gold and silver, and the usual concomitant, iron pyrites.

As might well be expected, this discovery caused considerable excitement, and has led to quite a rage for quartz prospecting. Several other ledges, of supposed value have been taken up. This, like all such enormously rich discoveries, is probably nothing more than a "pocket," which will soon be worked out, and leave the balance of the vein, perhaps below paying value. Such extraordinary rich deposits of gold, are never very extensive. A discovery equally as rich, or more so, was made in Oregon some three or four years ago, which created a great furor at the time, but which was soon forgotten. A Cariboo correspondent of the Victoria Chronicle, after admitting the possible richness of this discovery, says;—

"If nothing further of importance is 'struck' in Cariboo in the next month or two than is now known, I think that the population of the country will be less than it is at present; the trade of the country will be less, and merchants generally will feel that times are dull and hard."

**THE "LIMA."**—The claims of the Lima company are situated two hundred feet in the rear of the Chollar works. The ledge is a good one, is sixty feet wide, and on the "Comstock range"—three very good points in this country. It was located two years ago, by Billy Chollar himself. The company are sinking a shaft on it, which has now reached a depth of 170 feet. The stock, which is nearly all owned in San Francisco, has never been thrown upon the market. As the Lima is beginning to excite some attention here, we shall probably hear of it oftener in future.

The Shera company, contemplates expending about \$150,000, in ascertaining more definitely the contents of their mine and the shape in which it lies.



## THE REESE RIVER MINES.

The Reese River *Reville*, in speaking of the Mines there says: "Just think of it—more than 100 ledges already known in this one district which will pay, and pay largely—from \$150 to \$1,000 per ton. The stuff is universal—all around in the most unpromising ledges and out of the way places. This is the country for poor men; any sort of a claim from one inch to twenty feet in width will furnish pay ore right from the surface—will pay its own expenses and those of all connected with it, if worked. What more could be asked? Rich is no name for it; the country is positively "seedy" with it, and all available. But it is not proper for us to brag; we only ask skeptics to call and see for themselves, like all sensible men are doing."

The same paper in speaking of what the mills are now doing in that region, says:

Brooks is now crushing; his mill appears to work to perfection. The Pioneer Mill and Mining Company have obtained a site for their extensive mill in the canon below town, and have a number of men engaged in grading and preparing the foundation. Their machinery, timbers, etc., will arrive here in a short time. The Union Mill Company, just above, have received all their machinery, and are putting the mill together at a rapid rate. They will be under way in ten days. Hildreth & Co. are making good headway, considering the staunch manner in which they are doing things. Buel & Co.'s mill is busy pretty nearly all the time. The Oregon Mill Company have a large foundation up and are rushing things along.

One and a half tons of ore from the Union No. 2, worked at Buel & Co.'s mill, yielded \$450, or \$300 per ton in silver. The body of ore from which this lot was taken is not less than six feet wide, and increasing rapidly in breadth.

San Miguel rock, worked at Buel & Co.'s mill, yielded \$114 from 480 pounds of quartz—silver, 981 fine, with gold \$1 44 per ounce. This would be about \$475 to the ton.

F. Davis's water power arastra mill at Cañon City has been crushing the common rock taken from the Harding & Dickman ledge at Austin, which yielded 38 pounds of bullion to two tons of rock, or \$392 per ton. The next batch of rock to be worked will be from the Josephine, at Big Creek, which has worked \$518 to the ton. Dwier, McConnell & Co. are talking of establishing a mill at Cañon City. A mill has been commenced below, at Lander City.

Ten pounds, less three ounces, of Yankee Blade rock, first location, crushed in an iron mortar in Gardiner & Clough's office, yielded 9½ pounds of hard amalgam, which, retorted, gave 18½ ounces of silver, worth \$1 25 per ounce.

Oregon, Seymour, Blue, Washington, Magnolia and Florida, Manhattan, Ethan Allen, and a number of other claims above town, are taking out large quantities of rich pay ore. There seems to be no lack of quartz now ready to run almost any number of mills.

The success which has so generally attended the crushings thus far attempted seems to have inspired the miners everywhere throughout that region with renewed energy to apply themselves vigorously in the development of their claims. We condense from the *Reville*:

Work is progressing on a number of claims. Virginia tunnel will strike the ledge within 100 feet; Florence will run night and day very soon.

The developments in Union No. 2 are so important as to have a perceptible effect upon our whole mining district and the public abroad. On the surface it was not over a foot wide, but at a depth of 20 feet, where the shaft struck it, there is a solid vein of quartz 6 feet wide and an irregular formation of quartz for 6 feet more. The first 6 feet of quartz abounds in the purest oxide and chloride of silver, with other forms which make up the noted Mexican "Peacock ore," so very valuable.

One mile south of town, in the vicinity of the Union No. 2, is the Congress, one of the older locations and on which considerable work has been done. The shaft is now down 30 feet, where it has passed through the quartz lode, developing a choice quality of ore.

The Marshall company have several tons of choice ore sacked ready for crushing. They have the ledge opened in two places some distance apart, exposing a good sized lode of the utmost purity and value.

Springer and Ellis lose no time in the development of the San Domingo, in Springer Cañon. They have a shaft and incline down 30 feet, with a tunnel from near the bottom some 25 feet in. This mine, like all others southwest of town, contains the bromide ore in great purity and abundance. They have 10 or 12 tons out and ready for the mill.

Below this and toward the plain is the Miguel, a Spanish discovery of undoubted importance. An incline has been put down on it 30 feet and the ledge taken out of this distance. It is the right kind of rock and is well defined and improving.

The Vernon Ledge, Smokey Valley, is now showing very rich silver ore. An assay from the top gave \$2,329. Workmen are tunneling in on the vein, and find the pay streak at least two feet wide—increasing.

Maggie Ledge, near Yankee Blade, is a new and valuable

discovery, the rock being of a pure sulphide quality, and so rich at the surface that it has all been sacked up. Workmen are now down six feet with the shaft, but water has come in too strong to continue the effort to sink it. Hence a tunnel will be run immediately to tap the lode deep enough down to drain it thoroughly.

Die Vernon—This ledge, at a distance of not more than 12 feet deep, has been struck over eight feet thick, and this within gun-shot of the centre of Austin.

Queen Brady is the name of a ledge north of the town, supposed to be the same as the Sonoma. It is undoubtedly rich, as globules of silver appear all over the roasted or burnt rock.

The miners at Cortes District are busily engaged taking out very choice rock, quite similar to the rich ores of this vicinity. Andrew Veatch is away beyond, north, exploring the country and risking his life as usual.

## THE NEW STEAMSHIP "GOLDEN CITY."

The Pacific Mail Steamship Company is fast putting afloat a large and powerful fleet of first class steamers for this coast. The last of this fleet launched is the "Queen City," now on her way hither. The model of this vessel is much like that of the Constitution, but somewhat improved as to her sailing qualities. She is about the size of the Constitution, with engine driven by the same size of cylinder—105 inches diameter and 12 foot stroke. Her paddle wheels are 30 feet in diameter, capable of making 17½ revolutions per minute. She is built with water-tight bulkheads, fore and aft, dividing her into three compartments and is provided with 14 life-boats; has 56 splendidly furnished double state rooms, and in every respect the vessel is superbly fitted up and admirably adapted to the Pacific coast.

THE SARAH FRANCIS Gold and Silver Mining Company has been recently incorporated for the purpose of mining and milling, and buying and selling mining claims.

They own and have title to two claims in Webster district, Alameda county, of 1600 feet each, besides 50 feet in the Avalanche, 40 feet in Saturn and Venus, 60 feet in the Champion lode, White Cloud Co., 5 feet in the Good Hope, 10 feet in the Pride of the West, 10 feet in the Henry Clay, 10 feet in Wood Chopper, 80 feet in the Glengary and 75 in the Gould and Hale, in all of which the work of tunneling is progressing.

It would seem from the number of claims which they are developing in the Webster, Alpine and Mogul districts, that they must certainly meet with success, as they are not confined, in their operations, to the result of labor on any one claim. One share of stock in the above named company represents a corresponding interest in all the interest of the company in the above mentioned claims.

MINING SOUTH:—A Los Angeles correspondent of the Sacramento Union, writing August 25th, says that "300 ounces of gold had just come in from the new placers, and that the excitement in that city still continued." Three hundred ounces, one would suppose to be a small arrival to be considered worth reporting from a locality of such extraordinary reputed richness. All efforts to get up a large tide of emigration in that direction have thus far failed. It will be quite soon enough for such a movement when important arrivals of gold from that region are reported.

The same correspondent reports the arrival at Los Angeles of a large quantity of rock from the Slate Range district, from the Antrim and Comet lodes, which is enroute for San Francisco, and is said to be the richest rock yet brought from that district, yielding in silver over ten thousand dollars to the ton.

PROF. WHITNEY, who has been spending a short time in this city, has again gone to the mountains, in the prosecution of his geological labors. The rumor of his resignation, as State Geologist, and acceptance of the Superintendency of the Latrobe Tunnel, at Virginia City, is without foundation. It probably grew out of the fact that Professor Blake, formerly connected with the Geological Department of the Pacific Railroad Survey, has accepted that position. The Latrobe Tunnel is one of the heaviest and most important enterprises of that kind ever undertaken in the State.

WINE, NOT MINES.—Our compositor, last week, made us give Mr. Hittell credit for a very valuable article on the Mines of California. Mr. H. has written many valuable articles on the great leading industry of our State, but the article to which we alluded, and which was published in the last *Pacific Monthly*, was upon the Wines, not the Mines of California. Mr. H. appears to be a good judge of both,

## OWEN'S RIVER.

Considerable attention is being directed at the present time to the Owen's River country, to the south of Carson City. The Owen's River flows through one of the most delightful valleys on the Eastern Slope of the Sierra Nevada. The valley is about 140 miles long with an average width of about 10 miles. It is not considered mineral and has been brought under government survey and sectionalized. It is found to contain 592,040 acres, 200,000 of which is very superior agricultural land. Owen's River takes its rise in Mono County, about 40 miles south-west from Aurora. The upper banks of this river contain an immense amount of the finest timber in the world, which will soon become very valuable as a source of supply for the extensive agricultural interest which is soon to grow up in the valley, as well as for the mines which are located along the base of the Inyo mountains throughout its entire eastern border. At the southern extremity of the Valley is Owen's Lake, a beautiful sheet of water into which the river empties. This lake is about 20 miles long by 18 broad. The river, with slight improvements, may be made navigable for a small class of steamboats, at all stages of water, throughout the entire length of the Valley, and with the Lake affords a most admirable chain of intercommunication from one extreme of the Valley to the other. This Valley is from 4000 to 6000 feet below the summit of the Sierras, possesses a fine climate and is fast filling up with agriculturalists. The new comers express themselves as well pleased with the country, and with the mining prospects around them, to which they look for a market for their produce. Vegetables of every kind can be raised in great abundance, as well as the cereals. No further trouble is apprehended from the Indians, nearly all of whom have been removed to the Tejon Reservation. Portions of the Valley are covered, at the present time, with most luxuriant crops of red-top clover, herds grass, etc., and the natural productions of the soil.

The most northern mining district, we believe, is the Inyo, in which about 1300 claims have already been recorded. The *Times*, published at Aurora, in its issue of Sept. 5th, speaking of this district, says:—

"Capt. Peck of San Francisco is about to commence the erection of two furnaces; one for the Hooker company and one for the Burnside company, which are designed to smelt the ores of these companies. [Argentiferous lead or—Ed. Press.] Mr. Wingard has recently gone to San Francisco from Owen's River, and will forward forthwith machinery for a mill via Aurora. The San Carlos company will soon have their mill under way. This mill is driven by water power. Capt. Bosworth has arrived from San Francisco and commenced crushing the Union company's rock. The company has out at least five hundred tons of rock. [A friend at our elbow says 1500 tons would be nearer the truth. Ed. Press.] Their ledge is from eight to twelve feet wide, containing large quantities of gold and silver, the former predominant."

The Ida company are taking out fine rock; their ledge called the Nevada. De Bend City is the most central position and is improving very rapidly. The buildings are principally made of adobes. The town has been recently surveyed; the streets are 100 feet wide, crossing each other right angles. The blocks are 300 by 220, having an alley each of twenty feet. Many families from Sacramento, Virginia and southern counties are coming to the valley, and set to be pleased with their new home. San Francisco is already sending her share of settlers."

The Visalia *Delta* of a late date, in referring to this region, says:—

"A Steady stream of navigation is pouring into the Owen's river valley. The abundance of water power, in close proximity to the quartz leads, renders this the most desirable location we know of for miners. The farming land is being rapidly taken up, and in less than a year we look to see an industrious population of thousands settled there."

SAN BRUNO G. & S. M. Co.—The claim of this company is located near Silver City, and includes 1400 feet of ground. A shaft has been sunk to the depth of 80 feet and a ledge opened over sixty feet in width, of good pay rock. The company are about incorporating. The Devil's gate District will eventually be one of the best mining districts in the Territory.

THE EMPIRE COMPANY, is located at Santa Cruz. I seen a letter from a reliable gentleman, formerly a broker in this city, in which the mine of this company, is very favorably spoken of. They have an inexhaustible amount of rock easily attainable, which is estimated to be worth from \$1 to \$40 per ton.



# ASSAYS!

**Promptness and Accuracy Secured**  
By the Use of the Most Improved  
METHODS OF  
ANALYSIS!

**Advantageous Terms for Prospector's Clubs**  
and Mining Companies.

**J. H. CHURCHILL, M. A.,**  
(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. ly6

**RIEHN, HEMME & CO.,**

**ASSAYERS.**

Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.

**Assays Made of ores, Minerals**  
and Metals.

REFERRED WITH PERMISSION TO

Messrs. F. PARROT & CO., | Messrs. A. S. OP & CO.,  
R. B. SWAIN, Esq., | DUNHOPE, RALSTON & CO.

CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
Assaying, also in Mineralogy and Chemistry as far as re-  
quired to become a practical Assayer.

# BAUNCHEIDTISM,

THE PRESERVER AND PRODUCER OF LIFE.

THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF  
curing disease, is a "fait accompli" in medicine,  
and needs no more proof. The public has crowned Bunc-  
heidtism already with an extraordinary patronage, and it  
is acknowledged by all men of science that BAUN-  
CHIDTISM is founded on a rational, scientific basis.

It can safely, and with sure success be applied to pa-  
ralysis in consequence of Apoplexy, Palsy and Rheu-  
matism of every description, which kind of complaints  
can find their only relief by the above method.

Especially can it be applied successfully, in the spring  
of the year to diseases of the eye.

Dr. Borchers is the only doctor in California who has  
the original series of Dr. BAUNCHEIDT and his original  
oil. Dr. Borchers is also in possession of original letters  
of the inventor of the method by which he can prove  
that he is perfect master of the latter.

DR. J. C. BORCHERS.

No. 19 Kearney street, and No. 4, Mark's Place, First  
story, No. 5. Office hours from 9 to 11 A. M., and 1 to  
4, and 7 to 9 P. M. je-24

**WILLIAM BRODIE & CO.,**

**CALIFORNIA FOUNDRY,**

Fremont Street, near Market, San Francisco.

**Light and Heavy Castings,**

Of Every Description, Made to Order. Particular atten-  
tion paid to all kinds of House Work, Plain and Orna-  
mental. ly13

**Giffards Injectors,**

FOR SUPPLYING BOILERS WITH FEED WATER  
without Pumps No Mill or Mining Company  
should be without one of these valuable instruments.  
Send for a Circular.

DAVID STODDART, Agent.

je22 Cor. Pine and Front Sts., San Francisco.

# PATRONIZE HOME MANUFACTURES!!!

**James Longshore,**

**Trunk and Valise Manufacturer,**

307 Sansome Street, under Tehama House. Trunks and  
Valises, Wholesale and Retail, Fine Sole Leather Trunks,  
Valises, and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
aug x

**New Style of Ladies' Buckle!**

**W. BOHM,**

INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the  
construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
possesses several very important improvements over any  
other in use.

The invention having been carefully examined at the  
Patent Office, has been adjudged to be a useful improve-  
ment, and Letters Patent have been granted for 17 years.  
It excels all other buckles in

**Usefulness, Strength and Appearance.**

The Public is respectfully invited to call and examine  
this Buckle at the Jewelry Establishment of

BEAVERMAN & LEVY,

621 Washington Street, San Francisco.

JOSEPH, BROTHERS,

607 Montgomery Street, San Francisco.

FLOBERG & CONRAD,

118 F Street, Sacramento.

Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm," will be  
guaranteed as to its Strength and Durability.

W. BOHM, Patentee.

# THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of  
the most Effective, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
class of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

**ALONE STANDING THE TEST.**

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

**METHOD OF CRUSHING ORE.**

THE BRYAN BATTERY, as now constructed, is believed  
to combine all the improvements which the experience  
of the past has afforded. They have been

**EXCLUSIVELY ADOPTED**

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

**EFFECTIVE, SUBSTANTIAL AND RELIABLE.**

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ities. They are adapted to

**BOTH WET AND DRY CRUSHING,**

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent, more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1850, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing complete about 6,000 pounds,  
and the Five Stamp about 7,000. The Mortar Bed being  
cast in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,

John D. Winters & Co., Esmeralda,

Crown Point Co., Gold Hill,

Potosi Mining Co., Virginia City,

Tajo Mining Co., Mexico,

Sheba Mining Co., Humboldt.

Lotta Mills Co., Coso.

American & Mexican Co., Mexico,

San Carlos Mining Co., Owen's River,

Union Quartz Co., Aurora,

Triunfo Mining Co., Mexico,

Napa Quartz Co., Aurora,

Petaluma Quartz Co., Gold Hill,

Francis Mellus & Co., Slate Range,

W. R. Churchill & Co., Mexico,

Willow Springs Co., Coso,

Hews, Howe & Co., Rich Gulch Flat,

F. A. Benjamin & Co., Mexico,

O. J. Parker & Co., Nicaragua,

Gibbons & Clayton, Esmeralda,

Smith & Clouser, S. F. Reduction Works.

Amagoza Mining Co., San Bernardino,

**MANUFACTURED ONLY BY**

**GODDARD & CO.,**

**At the Pacific Iron Works.**

**SAN FRANCISCO.**

os 125 to 136 First street, and 126 to 144

Fremont street.

**I. C. E. KLEPZIG & CO.,**

**GUN MAKERS,**

...AND...

**DEALERS IN GUN MATERIALS,**  
733 Washington street, San Francisco,  
[One floor above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.

Gilding, and also Silver Plating, by E. Eklund. je21

**WANTED,**

**GOLD QUARTZ SUITABLE FOR**  
**CUTTING JEWELRY,**

By FRONTIER A. DEVIEREY,

au81 437 Pine street, San Francisco.

**John R. Sims,**



Oregon street, between Washington and Davis and Fron  
and Jackson streets, San Francisco.

**Manufacturers of Fire Proof Doors and**  
Shutters, Bunk Vaults, Grating, Cemetery Rail-  
ings. All orders from the Interior Oregon, Washington  
Territory, Vancouver's Island, British Columbia, or any  
place on the Pacific coast, attended to with promptness  
and dispatch.

**Mr. Sims Appreciates the Past**

liberal patronage of his friends, and trusts that he may  
continue to merit it in the future.

**For the Information of Strangers**

he would say that he feels confident that his experi-  
ence in his particular calling is surpassed by none on  
this coast, which his superior work, sent to almost ev-  
ery town in this state, Oregon, also Victoria and the Sand-  
wich Islands, and to be seen on some of the best build-  
ings in San Francisco, fully attests. A large assortment  
of second hand shutters for sale at low rates. ap18

**LEANDER RANSOM,**  
**Civil Engineer**  
**AND**  
**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

**ALSO**

**STATE LOCATING AGENT.**

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL**  
**LANDS,**

**At the low price of \$1.25 per Acre.**

Terms—Twenty per cent in cash and the balance  
on a credit of several years.

OFFICE: Second floor of Express Building, N. E. cor-  
ner of Montgomery and California streets. oct-8m

**D. NORCROSS,**

**Masonic Temple, No. 6, Post Street.**

**Military Goods of all Descriptions.**

**Navy Trimmings and Embroideries.**

**REGALIA FOR ALL ORDERS.**

aug 17

**FOR SALE.**

**PATENT PRESSED RUSSIA IRON MINING PANS.**

Russia Iron Quartz Screens for Mills;

Portable Forges; Cauldron Kettles;

Pumps, both Frame and Lift;

Lead Pipe; Rubber Hose;

Wrought Iron Pipe;

Bibb Cocks; Couplings; Play Pipes;

Cooking Stoves and Heating Stoves;

Tin Plate; Sheet Iron; Sheet Copper;

Fruit Cans of Various Kinds;

Lard and Butter Cans of all Sizes;

Iron Wire; Brass Wire; Copper Wire;

Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

**UNEQUALLED**

**MONITOR COOKING STOVE**

**OR RANGE,**

FOR HOTELS.

To which we call particular attention.

je-29

TAY, BROOKS & BACKUS.

**BRASS FOUNDRY.**—Among the many useful  
and importance mechanical establishments in  
this city, that of Messrs. W. T. & J. Garratt,  
Brass and Bell Founders is deserving of spe-  
cial notice. Without disparaging other firms,  
we would remark, that, so far as our observa-  
tion has extended, these gentlemen are at the  
head of their business in this city. They are  
prepared to execute every variety of orders in  
their line from a brass knob up to a church  
bell. Their establishment is complete in all  
its branches, and we would gladly recommend  
them to the consideration of our friends gen-  
erally.

**Mr. G. Moore,** of 612 Sacramento street, of-  
fers favorable opportunities to those wishing  
assays of ores, mineral waters and guanos.  
The references to his card, in our columns,  
speak for themselves. Mr. Moore stands high  
as a chemist, and his charges are reasonable.

**Mons. F. A. Devierey.**—We had the pleas-  
ure of inspecting the establishment of this ac-  
complished artist last week. We can speak  
in the highest terms of his skill as a lapidary.  
We also saw some splendid specimens of his  
own manufactured jewelry. We beg to re-  
commend him to our friends. His place of  
of business is at 437 Pine street.

**Messrs. Riehn, Hemme & Co.!** These well  
known scientific gentlemen are now in busi-  
ness as assayers. They have a splendid la-  
boratory on Summer street. Mr. Riehn, from  
his official connexion with the United States  
Mint, is too well known in our community to  
need praise from us. All business intrusted  
to them will certainly be executed with effi-  
ciency and dispatch. Their office is on Mont-  
gomery street, opposite Wells, Fargo & Co's.

**G. E. MORE,**

**Assayer and Analytical Chemist,**

No. 612 Sacramento Street,

HAVING ESTABLISHED A CHEMICAL LABORATORY,  
furnished with every requisite for delicate Analyti-  
cal work, is prepared to execute the Assay and Analysis  
of Ores, Mineral Waters, Guanos, etc., with accuracy  
and dispatch.

REFERENCES:

Prof. J. D. Whitney, State Geologist, San Francisco.

Alson & Co., San Francisco.

Sather & Church, San Francisco.

John Parrott, San Francisco.

D. O. Mills, Sacramento.

sep14

**PEOPLE'S**

**OPPOSITION**

**Steamship Line!**

**Connecting California and New York**  
**VIA NICARAGUA.**

**GREAT REDUCTION IN RATES!!!**

**750 Miles Shorter than Panama Route!**

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**

**J. H. BLETHEN..... COMMANDER**

Will be dispatched for

**SAN JUAN DEL SUR,**

From Mission street Wharf.

**SATURDAY, - - - - - OCTOBER 3, 1863**

Punctually at 9 o'clock, A. M., on

Connecting at GREYTOWN with the Splendid Steamship

**ILLINOIS - - - - - 2500 Tons.**

The Moses Taylor, since her last trip has undergone  
the most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins enlarged, rebuilt and  
repainted throughout—making her accommodations equal  
to any Steamer on the coast.  
Every arrangement has been made by the Central  
American Transit Co for transporting passengers across  
Nicaragua in a few hours.

For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco, west of the  
P. M. S. Co's. Office, also T. Boyce.



## DOWN IN A COPPER MINE.

During our recent visit to Copperopolis we took occasion to look into the interior of the famous Keystone Mine. The Keystone is the first Northern extension of the Union Mine, the most productive and probably the most valuable copper mine in the world. It was upon ground now belonging to this Company where the first copper, upon the great Copperopolis lead was originally struck, and one of the main shafts of this mine has been named "The Discovery Shaft," in commemoration of that fact. The Keystone is probably the most thoroughly developed copper mine in the State. It has been worked about two years, in which time over 1,000 tons of No. 1 ore have been shipped; 10,000 tons of No. 2, raised to the surface and ready for concentration, and from 12,000 to 15,000 tons of No. 2, uncovered in the mine and all ready to be taken out with the expenditure of a very small amount of labor. The present rate of shipment is not far from 200 tons of No. 1 ore per month.

The immense piles of ore and waste dirt heaped up about the main shaft of this mine gives the visitor some idea of the vast cavernous openings made below. Not satisfied, however, with this "evidence of things not seen," on the invitation of the Superintendent, Capt. Richard Powning, or "Capt. Dick," as he is more familiarly known, we resolved on a visit to the interior of the mine.

We prepared for the descent by encasing ourselves in a complete mining rig, of overalls, blouse and slouched hat; then, with candle in hand, we followed the Captain down the ladder way, preferring that mode of descent to going down in the "tub." The work upon the shaft which we descended, having been conducted by different parties, who, from time to time, had been in charge of the mine, does not not exhibit the uniformity of design and engineering skill, which always should appear in a work of that character, and which, doubtless, would have been manifested, had Capt. Powning been in charge of the mine from the start. Much care and judgment should be employed both in the selection of the locality and in the manner of sinking and securing the main working shaft of every mine, and especially of a mine of such value and destined to be so extensively worked as the Keystone. The mistakes and imperfect engineering of the early management of this mine will yet have to be remedied at considerable cost. Many thousands of dollars have been worse than thrown away on this work, in consequence of a lack of experience. The present Superintendent is making the best possible use of the work of his predecessors.

The descent to this, like that to all other mines of any considerable depth, is by a succession of ladders reaching from one platform to another, at intervals of about twenty-five feet, through which, in ascending or descending, the individual must pass by means of a small opening just large enough to admit of the passage of the body. From this shaft passages upon the right and left, lead to the various galleries and drifts where the workmen are engaged in breaking out the ore from its place in the mine. In the present instance, after descending about 150 feet, the visitor begins to come within hearing of a confusion of sounds, which come up from below—the noise of hammers striking upon drills, the stifled sound of the pick as the sturdy miner deals heavy blows at the crevices and yielding rock before him, the rattling of the shovel as the broken ore is raised from the drift and placed in the car or tub, preparatory to its journey to the surface or "grass" as it is technically termed, and human voices, rendered strangely hollow by the echoes of those cavernous depths, with now and then a dull heavy sound from a blast, fired in some adjacent gallery—serve to impress upon the mind of one, who for the first time finds himself in such a position, an indescribable feeling of wonder and astonishment at what he sees and hears around him. The glare of the feeble lights reflected against the black and dripping walls; the damp, cold, clammy and oppressive atmosphere of the mine; the pitchy blackness of the atmosphere and every thing else, a few feet from the candles, also serve to quicken one's perceptions as to the difficulties and dangers of mining; while, notwithstanding the most determined effort to put on a careless exterior, a peculiar nervousness will inevitably creep over the system—the infallible offspring of an intruding doubt as to the safety of your position. When you look around you, and observe the slender timbers, placed with so much care, as a support of the su-

perincumbent walls, the fear inevitably comes over the unaccustomed visitor, least those walls, of such immense weight and extending, perhaps, hundreds of feet above you, should suddenly crush in their feeble supports, and bury you forever from the light of day! You strive to smother the impressions with an assumed feeling of awe and admiration at the spirit of enterprise and daring which leads the miner to brave such dangers for the accomplishment of the great purpose of his calling—the extraction of the minerals, the sinews of the earth, by which, more than all other material things, nations are enabled to gain strength and importance among their neighbors, and accomplish mighty results in the great march of human progress!

While you are thus engaged in reverie, grand yet fearful it is a source of the utmost relief that your guide, whose attention has been engaged the while in some little matters of business connected with his care, suddenly calls your mind from its wandering and directs your attention to the busy scenes and interesting sights before you. He takes you to the extreme end of a drift where the recent blows of the pick and hammer have exposed the shining ore. The light from your candle, as you hold it near the walls, is reflected from a thousand sparkling "pyrites," or reveals to your vision the masses of "sulphurets," as they still remain, undisturbed, in the place where they were formed in the great laboratory of Nature. There they are, just as you have seen them in your little cabinet at home—the pyrites, the sulphurets, the hard grey ore, with here and there a small quantity of red or black oxides filling up some little crevice, where they have been deposited by some of the chemical reagents which are in constant yet slow action all around you. The carbonates have all disappeared. They are always found near the surface, and have long since been taken away.

You have now passed some distance from the main shaft. Your guide takes you into a little side drift and directs your attention upwards; you hold your candle aloft and look up—up into an impenetrable darkness! Your candle burns with renewed vigor, and flashes wildly; you feel a refreshing and invigorating draft, contrasting strangely with the damp atmosphere of the gallery which you have just left. You have approached an air shaft, which has been opened for ventilation. In all extensive mines, properly opened, you will find various airshafts, and longitudinal air passages, by which a constant natural circulation is kept up, without the expensive and inconvenient arrangements of "blowers," which always have to be put up in mines which are not opened with special reference to this important particular. You will find such an arrangement—two or three of them—on the Union mine adjoining the Keystone. They make a great deal of noise, require a large amount of power, and after all perform their office of ventilating the mine very imperfectly. A little of the right kind of knowledge, where two or more shafts are connected, will enable the superintendent to ventilate his mine without any such artificial means as "blowers." The Keystone, we believe, is nearly one hundred feet deeper than the Union, yet the former is thoroughly ventilated by the simple control of a natural draft of air. Of course, under all circumstances, the air of a mine must be quite impure at best. But we have been standing quite long enough near this "air-shaft" to become thoroughly ventilated.

Let us follow our guide. Here we are again at the bottom of the ladders, and our attention is directed to a windlass and bucket, just as we sometimes see them on the surface. On looking down we perceive that workmen are engaged in going down still deeper with the main shaft. The earth is hoisted from this extension shaft up to the "dump hole," by the windlass we have just noticed. To this "dump hole" is also brought the ore and water from the galleries and drifts upon each side of the main shaft, and from this point taken to the surface. If we wish to go down into this, the lowest part of the mine, we shall find no ladders, but the visitor places one foot in the "bite" of a rope properly secured, and standing perpendicularly, holds tight to another portion of the rope over his head, and thus swings himself off the platform over the abyss below. The windlass man, then lets him down, in the same manner as he does the "tub." Here we are, about 280 feet from the surface, in the lowest portion of the mine yet opened. From the bottom of this shaft galleries will soon be run in both directions. The vein between this and the level above will be "stoped" out, the "ladders" extended down, another "platform" built, and the windlass men again go on sinking; and so on down, down, deeper

and deeper, as long as the mine will pay in depth.

But our adventurers as well as our readers are getting quite exhausted; so without seeing half the sights in the mine, or exploring half its galleries and drifts, we will make the shortest possible way to the surface by an imaginary ride to day-light in the "tub," which in this case, happens to be worked by a horse-whim, and of course hauls us up more slowly than a steam engine would. Perhaps before we go down again, Capt. Powning will have his engine in operation, which, as we emerge to the day-light, we see a few feet in front of the shaft almost ready to "fire up."

## THE MINING SHARE MARKET.

The depression in the Mining Share Market, heretofore, of late noticed, still continues. So great, indeed, has it become, that it has already resulted in an evident disposition on the part of capitalists to call in their loans and reduce their risks on this class of stocks. The causes of this depression are not attributable so much to any lack of confidence in the ultimate success of the leading mines as the prospect of an endless litigation which seems to hang over them.

There appears to be a fatality, in this respect, which has ever cast a threatening shadow over the prosperity of California in every thing which pertains to a question of title. This great incubus seems to have followed our citizens in their transmontane migration, with even a more threatening aspect than it ever presented on the Western Slope. It has now become the especial curse of our land, retarding our prosperity in its most essential point—the development of mines—thereby turning from this coast the flow of capital which would otherwise set thitherward with a volume and uniformity without parallel in the history of past commercial transactions. It is difficult to determine to what point we are to look for even a ray of hope for escape from this terrible infliction. There is evidently a radical defect somewhere—perhaps everywhere—in our Judiciary, in our jury system, and among the people at large.

Ophir has still further declined. The sales of the week have been rather larger than usual, but altogether on time. Contrary to expectations there was no increase in the dividend, which was declared on Monday last. \$48 per foot is still the figure.

Gould & Curry is dull at \$4,400 on time.

The California is still inactive, awaiting the results of the Latrobe Tunnel, which is progressing slowly, in consequence of the precaution necessary to be observed to avoid damage from water, by striking the vein too suddenly. They are now very near the lead, and important developments may soon be expected.

The Central is about putting in a second pump, in connection with the California and Ophir.

The Chollar still remains comparatively quiet; few transactions noted. The prospects of this Company are most encouraging in everything, save its lawsuits. Their works now going up are very superior and the mine never looked better.

Potosi is still growing in favor, having met with a material advance. This mine is an exception to the general decline, and is now very firmly held at \$1,500. The probable postponement of the suits pending against this Company, coupled with the large yield of the mine for the past two months, is said to influence their stock very favorably.

Savage is not in much demand, notwithstanding the continued improvement of the mine. Report says that the quality of the ore improves as the works increase in depth. The Company will not put up a mill at present, preferring to wait further developments in working silver ores which they anticipate will be available by next spring. The mine of this company has been proved rich throughout its entire extent, and is probably as safe for investment as any mine in Virginia City. The "pay streak" of this mine is represented as fifty feet wide, and as soon as they can make arrangements to have the ore worked to their satisfaction, they will take out 150 tons per day.

The Dick Sides met with quite a heavy loss in the burning of their engine house, at the late fire, and some three or four weeks must still elapse before they will be able to resume work.

The Best & Belcher, on the contrary were gainers from the fire inasmuch as it cleared their ground of certain squatters, who had become quite annoying, giving them possession of



ground of which they will not again be quietly dispossessed.

Wide West has fluctuated from \$75 to \$115.

Utah is in some repute at about \$55.

Real Del Monte is in favor at \$300, buyer 30 days.

The Consolidation Antrim Company (Slate Range) is favorably mentioned. Some fine specimens of ore from this mine are on exhibition in this city. It is said that ore is now being taken from Antrim No. 2 which will yield \$2000 per ton. Rich assays have been obtained from ores found in the Slate Range District, and it is attracting a good deal of attention.

North American shares continue in favor, and have been largely sold; opened at \$74, advanced to \$90, and closed at \$78.

Baltimore American, dull at \$45; Echo, at \$50.

We subjoin the sales of the week.

Ophir.....	360 Shares	\$2100 @ \$2250	b 30 per foot.
Valley of Clyde.....	55 "	5 @ 5½	" "
Great Western Tun.50	"	1	" "
Josephine.....	75 "	11½ @ 13	" "
Go.....	40 "	7	" "
Gould & Curry.....	64 "	4,400 b. 30	" "
Savage.....	5 "	3,000 b. 30	" "
Chollar.....	28 "	950 b. 30 @ 975	" "
Male & Norcross.....	20 "	1,800 b. 30 @ 2,000 b. 30	" "
Nele Sam.....	317 "	110 @ 175	" "
Echo.....	5 "	50	" "
Salic.....	246 "	40 @ 52½	" "
El Dorado.....	10 "	65	" "
North Potosi.....	18 "	37½	" "
aledonia Tun. Co. 40	"	32½ @ 40	" "
Independent, G. H. 17½	"	40	" "
Silver Hill.....	3 "	27	" "
Garibaldi.....	30 "	6	" "
Goldie Bluff.....	50 "	4	" "
Willow Springs.....	140 "	57½	" "
Heba.....	150 "	90 @ 120	" "
De Soto.....	156 "	32 @ 67½	" "
Monte Christo.....	10 "	5	" "
Indsall.....	10 "	25	" "
Rob Black.....	25 "	40	" "
Lechattucup.....	5 "	25	" "
Napoleon.....	2 "	60	" "
Elowes.....	15 "	95	" "
Potosi.....	34 "	1200 @ 1400 b 30	" "
Yellow Jacket.....	43 "	1000 @ 1125	" "
Imperial.....	"	"	" "
Verman.....	32 "	475 @ 600	" "
West & Belcher.....	"	"	" "
Serra Nevada.....	62 "	77 @ 90	" "
aney.....	280 "	85 @ 127½	" "
Burning Moscow.....	206 "	100 @ 125	" "
Charles Caney.....	103 "	22 @ 30	" "
Baltimore American.....	5 "	45 @	" "
North American.....	975 "	66½ @ 86	" "
Callion (G. H.).....	"	"	" "
Side of the West.....	82 "	65 @ 77½	" "
Spanish No 2.....	62 "	30 @ 47½	" "
orton.....	45 "	4½ @ 6	" "
n side.....	69 "	9 @ 11	" "
diatic.....	30 "	6	" "
wa.....	"	"	" "
alison.....	"	"	" "
uckeye.....	138 "	32 @ 36	" "
ecrne.....	"	"	" "
dy Bryan.....	"	"	" "
t. Davidson.....	"	"	" "
dar Hill Tunnel.....	"	"	" "
orth Ophir.....	"	"	" "
ide West.....	204 "	75 s 30 @ 117 b 30	" "
al Del Monte.....	13 "	400	" "
ah.....	"	"	" "
ond.....	145 "	35 @ 60	" "

## COPPER.

Copper still continues a matter of important enquiry "on range" and everywhere else in mining or general business circles. The stocks of productive mines are constantly advancing with holders firm. The time required in opening out copper mine, for sinking shafts and running levels, is as important to the value of the mine as a paying lode, and ore held to-day at \$40 to \$60 per foot, if well wrought, may advance within a year to much larger figures.

The Keystone has levied an assessment of \$5 to complete its machinery. The work of development is being pushed ahead at the expense of present shipments—the labor being devoted to that end.

The Napoleon still continues its usual shipments. Sales more to the amount of \$10,000 have recently been made and the net monthly earnings of the mine now reach a handsome sum.

The shipments of the Union now average about 800 tons per month.

The Copper Hill Company are shipping about 100 tons per month. The Company is said to be in a flourishing condition—no stock in the market.

The Table Mountain Company is still energetically at work developing their lode. Sales of this company's stock are reported at \$40.

In Sonoma county about fifty independent ledges have been struck, upon which it is estimated fully 1000 claims have been located. The Woodland Company have struck promising ore within fifteen feet of the surface. Twenty-five feet in this company's claim recently sold for \$30 per foot. One sale in the Union, an extension of the Woodland, is reported at \$400 to the share, (200 feet.)

In El Dorado county some rich strikes are reported, and the Home Copper Company is said to have found good ore at a depth of 75 feet.

In Placer county the different companies are vigorously at work, and a considerable amount of capital is being expended.

In Nevada and Yuba Counties the interest in copper is continuous, without any apparent abatement. In some of the companies shares have risen to \$100 per foot. Three or four companies have an abundance of ore averaging 40 per cent. of copper. The Prettman, or Well claim, Eureka, Last Chance, and Stillhouse claims are the most valuable.

The copper mania is still working its way northward. Copper croppings can be distinctly traced from Del Norte and Siskiyou counties from 60 to 70 miles into Oregon. The Dalles Journal publishes correspondence from Masco county to the effect that the Martillot lead yields copper assaying as high as 60 per cent.; the Star lead is fully as rich. (Probably specimens.) The Stonewall lead assays \$13 in silver in addition to its copper yield; the copperhead lead contains copper, silver and gold; the New Helvetia containing silver and gold is as rich in copper as the Martillot. There are a large number of other leads, in the same neighborhood. The regular silver leads have also been discovered in this locality, which are elsewhere more fully worked.

The Press of Victoria is also calling attention to the copper discoveries in that section. They warn their readers that gold deposits must soon cease to be remunerative, and that more reliable minerals must be sought.

The Colorado mines are also attracting an increasing degree of attention. The great importance of that region as a mining district claims special regard, being within our own territory, and possessing a traditional reputation. Reports of rich discoveries are of frequent occurrence, both in placer and vein. The Apache Chief Company, it is stated, have struck a valuable lead of copper, assaying some 60 to 70 per cent, and about thirty miles east of La Paz.

All the ores from that quarter which have arrived in this city reach a very rich assay. If the mines of that region continue to any great depth they must soon become of great value. There are some reasons for believing that they will result much like the Similor ores which, for some years, have been found in such great abundance in Chile, but which, of late, have been giving unmistakable evidences of an early exhaustion. It is to be hoped, however, that such may not be the result with the mines of Colorado.

In Sonora, also, so far from abating, the rage for mines, both in copper and silver, is strongly on the increase. A recent correspondent of one of our daily contemporaries, writes from that region as follows:—

"One operator, who had bagged only nine mines in a fortnight's run, was greatly chagrined to find that his friend and adviser had beaten the best ground and secured fifteen. He will probably be up on this steamer, disgusted with his ill luck. Let me here advise every one to be cautious of investments in copper mines in the low lands or coast strips of Sonora—all experience, with scarcely an exception, having proved these veins superficial and comparatively worthless. I stepped into the Prefectura half an hour ago and recognized ores of mines, just denounced and represented as "fabulously rich," which I examined by request of ex-Gov. Cubillas five years ago, and which were then rejected as worthless."

## ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, Aug. 26, 1862.]

Alpine.....	Bid	Ask	Lilly Dale.....	Bid	Ask
Amphlett.....	4	10	Live Yankee.....	20	35
Atlantic.....	2	—	Lord Byron.....	7	12
Arcade.....	—	—	La Plata.....	8	18
Aurora Tunnel.....	5	8	Lizzie Leighton.....	2	5
American Freeman Tun.....	7	10	Middle Hill Tunnel.....	6	9
Antelope.....	375	—	Main Esmeralda.....	25	30
Alturas.....	10	15	Monroe.....	10	40

Atina.....	5	—	McKinstry Tunnel Co.....	3½	10
Brazos.....	9	10	Monte Christo, Tunnel co.....	—	—
Bodie Lead Consolidation.....	3	6	Mutual.....	—	—
Bodie Peak, Bodie District.....	10	16	Mount Bracy.....	3	8
Bombay.....	10	20	Mary I. Gardner.....	—	—
Bowater.....	10	20	Miner's Tunnel.....	3	8
Bullion (Van Horn Dist.).....	3½	10	Mary's Tunnel.....	—	—
Bodie Bluff, No. 1.....	3	10	Meredith.....	—	—
Bodie Bluff, No. 2.....	16	—	North Willow Springs.....	2	6
Bunker Hill.....	6½	10	New Esmeralda Consol.....	2	6
Bonaparte, Tunnel comp.....	10	—	Newton.....	—	—
Camasah.....	11	—	Nevada, (Tunnel).....	1000	—
Camo.....	100	200	Old Esmeralda.....	10	10
Crockett.....	100	200	Paul Tunnel Co.....	—	—
Cape.....	—	—	Pacific.....	6	10
Clay Alpine.....	—	—	Pond.....	25	40
Davis, Consolidation.....	—	—	Pride of Antelope.....	—	—
Dargin.....	9	—	Peru (two ft. to the share).....	8	10
Delta.....	15	—	Pennsylvania Tunnel Co.....	7	10
East Esmeralda.....	10	—	Real Del Monte.....	410	460
Excelsior, Excelsior Dist.....	16	20	Rebecca.....	—	—
Empire.....	16	20	Red, White & Blue.....	—	—
Franklin, Tunnel company.....	—	—	Stanford Tunnel Co.....	—	—
Fall-tail.....	4	6	Schenectady.....	20	—
Felstaff, Consolidation.....	4	6	Strawberry.....	—	—
Freemont.....	8	6	Silver Hill.....	60	—
Galley of Clyde.....	4	—	Silver Hill, Bodie District.....	—	—
Great Factor.....	1	—	Seymour.....	—	—
General Hooker (Con.).....	25	30	St. Louis.....	10	—
General Jackson.....	13½	14	Tuscan.....	—	—
Garibaldi.....	40	—	Tiger.....	3	—
Golden Harvest.....	5	—	Tucker.....	—	—
Golden Cross.....	20	25	Tennessee.....	—	—
Governor Seymour.....	25	—	Union Tunnel.....	10	80
Golden Age.....	25	—	Utah.....	120	—
Great Britain.....	—	—	Utah prospect.....	105	125
"Golden Era" Tunnel Co.....	—	—	Utah (extension).....	6	10
Greenback.....	12	25	William Tell.....	—	—
Hanover.....	1	3	Wide West.....	140	160
Howard Tunnel Co.....	1	3	Washington, Tunnel comp.....	—	—
Herman Tunnel.....	15	12	Western Summit.....	—	—
Home Check, Excelsior Dis.....	5	—	X-Elbow and Georgetown.....	1½	5
Junata.....	—	—	consolidated.....	—	—
Keeney.....	—	—	Yanicy.....	—	—
Dance.....	—	—	Cortes, consolidated.....	10	15

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending Sep. 12, 1863.

Names of Companies.	Total No. Shares.	Shares per ft	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
WASHER STOCKS.									
Ophir.....	16,800	12	\$300	2225	2050	2100	2100	2100	2000
Gould & Curry.....	4,800	4	500	—	4400	4300	4000	4300	—
Savage.....	800	1	—	—	2500	—	—	—	—
Chollar.....	5,600	4	300	950	950	975	900	700	750
Potosi.....	2,800	2	500	900	1000	—	1100	1250	1200
Hale & Norcross.....	80	2	600	1500	—	—	1200	—	1500
Sierra Nevada.....	3,000	1	500	87½	80	82	75	80	79
Northern.....	8,000	4	500	87½	87	91	110	117½	125
Burning Moscow.....	4,800	2	100	110	101	107	115	121	100
North Potosi.....	3,000	1	300	37½	—	35	37½	37½	30
Meredith.....	7,200	2	125	30	—	—	35	30	—
Charles Caney.....	1,500	1	30	22½	21	22	23	23	26
Sacramento.....	1,800	1	500	70	—	65	70	70	—
Iowa.....	—	—	—	—	—	—	62½	65	62½
El Dorado.....	1,600	1	—	7	6	4½	4	4	4
Norton.....	—	—	—	7	9½	9½	8	6	—
Burnside.....	—	—	—	—	4½	4	6	6	—
Adriatic.....	—	—	—	—	—	—	—	—	—
Brennus.....	—	—	—	—	—	—	—	—	—
Pride of the West.....	—	—	—	72½	60	60	72½	71	72½
G. H. Quartz M. Co. Imperial.....	10,000	1	100	400	400	—	400	—	—
Cedar Hill Tunnel.....	10,000	1	200	—	2	1½	—	—	—
Mount Davidson.....	10,000	1	100	—	2½	—	2	—	—
Central.....	1,800	12	300	—	—	—	—	—	—
California.....	3,600	12	300	—	—	—	—	—	—
Rogers, F. D.....	2,000	1	250	—	—	—	—	—	—
Lucerne.....	1,800	1	100	—	—	—	—	—	—
Lady Bryan.....	5,000	1	500	—	—	—	—	—	—
La Crosse.....	—	—	—	—	—	—	—	—	—
Moss.....	—	—	—	—	—	—	—	—	—
Porter.....	—	—	—	—	—	—	—	—	—
Crown Point.....	—	—	—	—	—	—	—	—	500
Manhattan.....	—	—	—	5	—	—	—	—	—
Hudson.....	—	—	—	—	—	—	—	—	—
La Jolla.....	—	—	—	—	—	—	—	—	—
Schiller.....	—	—	—	—	—	—	—	—	—
Sauca.....	—	—	—	—	—	—	—	—	—
Vesuvius.....	—	—	—	40	20	17½	12½	12	12
ESMERALDA STOCKS.									
Wide West.....	2,600	1	600	115	105	100	93	78	82
Antelope.....	1,200	1	600	160	—	—	100	—	100
Esmeralda.....	1,600	1	1000	25	25	23	—	—	—
Real Del Monte.....	4,400	1	400	—	875	875	300	370	370
Utah.....	1,600	200	—	—	48	48	40	40	—
Silver Hill.....	3,000	1	500	26½	26	25	—	25	—
Nevada.....	1,200	1	250	—	—	—	—	—	—
Federal Hope.....	—	—	—	—	20c	—	—	—	—
South Utah.....	—	—	—	—	—	—	—	—	—
Jenny Lind.....	—	—	—	—	—	—	—	—	—
Falls of Clyde.....	—	—	—	4	4	—	3	—	—
Banbeam, S. W. ex. B.....	—	—	—	—	—	—	—	—	—
Bamboo.....	600	—	500	—	—	—	—	—	—
Great West Tun.....	—	—	—	—	25c	—	—	—	—
Burlington.....	—	—	—	—	—	—	—	—	—
El Paso.....	—	—	—	25	25	—	35	—	25
Crockett.....	—	—	—	—	—	—	—	—	—
Atina.....	1,200	1	100	—	—	—	—	—	—
COPPER STOCKS.									
Josephine.....	4,800	2	250	—	10	10	10	11	12
Willow Springs.....	2,700	1	100	—	8	—	5½	—	—
Coso.....	1,800	1	600	3½	4	4½	4½	4	5
MEXICAN MINES.									
Mina Prieta.....	2,200	—	1000	—	—	—	—	—	—
Dios Padre.....	—	—	—	—	—	—	—	—	—
COPPER STOCKS.									
Napoleon.....	2,700	1	600	—	50	50	55	20	30
Josephine.....	—	—	—	—	3	—	—	—	—
CALIFORNIA STOCKS.									
Laurel Hill.....	—	—	—	3	—	—	3	3	3
Rhodes Diggings.....	—	—	—	—	—	—	—	—	—
Eureka.....	—	—	—	85	—	—	—	—	—
Fellows.....	—	—	—	—	—	—	—	—	—
Rock River.....	—	—	—	—	—	—	—	—	—
Utica.....	—	—	—	—	—	—	—	—	—
HUMBOLDT STOCKS.									
De Soto.....	—	—	—	42½	31½	34	32	33	—
Great Basin.....	—	—	—	—	—	—	—	—	—



MR. EDITOR: Your correspondent "P" now promises that he "will not mislead your readers." The question was, did he not do so in his letter of the 3d ult.; he still intimates not, and refers me to a work of Dr. Hoffmann's. I may say, *en passant*, that though I have cause to remember, with gratitude, the instructions I received from that eminent Professor, I should not have selected him as an authority on metallurgy, as I believe from the days of his studentship, his attention has been almost exclusively devoted to organic chemistry. But even Dr. Hoffmann is against "P." In Fowne's chemistry, the 7th edition of which was "revised throughout" by Dr. Hoffmann, I find, after simple instructions for testing for silver with nitric acid and soluble chloride, with exposure to light, "Lead is the only metal which can be confounded with it." So much from Dr. Hoffmann as to the practical question whether "P." is misleading miners when he suggests instead of the above, a delicate operation which, in the end, he says may be complicated with antimony and bismuth. On the purely chemical part of the question, it is water and not hydrochloric acid which produces the subsalt of bismuth, which "P." means and if too much water were added the free nitric acid would at once redissolve it—its formation is however obviated by the use of enough acid. P. talks of "falling on me again." Your Cornish readers will understand me when I claim "the first fall" for

A. POOR CHEMIST.  
San Francisco, Sept. 7th, 1863.

BUCKEYE COMPANY.—This company, says the Territorial *Enterprise*, whose claim is located near Silver City, are now working their mine in a very energetic manner. Within the past four months they have opened their ledge in three places. In their north incline, which is down a depth of 170 feet, they have found good silver bearing quartz, but water came in so fast they were compelled to suspend operations at this point. The President and Directors arriving here about this time, at once contracted for a 30-horse power engine to keep the mine free from water. When this is in working the company expect to take out a large quantity of rich ore from this incline. The Superintendent a few days since discovered an old tunnel running in a distance of 90 feet, in which the ledge is found to be from 8 to 12 feet in width, the quartz bearing a resemblance to that found in Gold Hill. In twenty-four hours' time 40 tons of this rock was taken out. The company are confident that they can, after a short time, raise from 500 to 1,000 tons of ore each month. They have all the conveniences necessary at the mine; buildings for workmen, powder-house, office for Superintendent, etc. Roads are built of width and grade suitable for the heaviest loads, and nothing seems to be wanting to make this one of the best mines in the Devil's Gate District.

THE steamer Constitution, for Panama, took away 105 bags of Silver Ore, in addition to her large shipment of \$1,454,207 in treasure.

TELEGRAPHIC.—Ten thousand dollars have been subscribed in Humboldt and along the line, for the building of a telegraph to California. The line will be in operation in about three months.

AGE OF THE BIG TREES.—Professor Whitney, State Geologist of California, fixes the age of the mammoth trees forming the big grove of Tuolumne at one thousand two hundred and fifty years.

## GENERAL NOTICES.

DR. H. AUSTIN,  
DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices.

je-29

## DESKS

AND

Office Furniture,

OF ALL KINDS..... FOR SALE BY

JOHN WIGMORE,

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all kinds, attended to.

## SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidesdorff street,

Opposite the What Cheer House, San Francisco.

## CHARLES GEDDES,

ARCHITECT,

Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms,

je 20 San Francisco

## FREDERICK MANSELL,

MECHANICAL &amp; ARCHITECTURAL

DRAUGHTSMAN,

No. 422 California street, corner of Leidesdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

## New Patent Agency.

WE HAVE CONNECTED WITH THE

Publication of the "MINING AND SCIENTIFIC PRESS"

The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

Mining and Scientific Press Agency The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

FOREIGN PATENTS OBTAINED By application at this office, Room 27, Government House. EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

## PATENT RIGHTS.

Patent Rights Bought and Sold,

At the office of the "Mining and Scientific Press" Agency EWER &amp; SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

## Offices To Let,

In the Government House, Corner of Washington and Sansome Streets. Two large suits of Offices, the most commodious and accessible in the city. C. A. CRANE, Proprietor

## GENERAL NOTICES.

## HAYNES &amp; LAWTON,

IMPORTERS AND DEALERS IN

## CROCKERY,

GLASS WARE,

## FRENCH CHINA,

Coal Oil Lamps, Table Cutlery

## CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCHANT,]

SAN FRANCISCO.

## WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. 2016-4f ZENAS WHEELER.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

## REMOVAL.

OFFICE OF THE PACIFIC METAL Surgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased. COPPER ORES.—Highest market rates advanced to cash, for shipments. S. C. BRADSHAW, Agent, 509 Sacramento street, near Sansome.

## NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Webb,

SAN FRANCISCO.

GEO. A. METCALF.

D. S. HUTCHINSON.

## METCALF &amp; HUTCHINSON'S

PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

## CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

## \$3. Per Dozen!

Large sized Photographs \$3.—Extra copies \$1 each. AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children. Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

## HOTELS.

## International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

## FIRE-PROOF BRICK BUILDING.

Steamer's Landing, Business etc. &amp; Places of Amusement.

OPEN ALL NIGHT.

City Railroad Cars Pass the Door.

REDUCTION IN PRICES.

Fine Bathing Rooms attached to the Barber Shop Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent Spring Bed and Hair Mattresses. The International offers to guests the greatest number and

BEST FURNISHED FAMILY ROOMS;

and SEVERAL GOOD TABLES as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

## Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CALIF.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,

WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—all by the day, meal or week. WE SOLICIT A CALL FROM ALL.

F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

## THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts., SAN FRANCISCO.

H. T. FELTON

W. C. MINOR

PROPRIETORS.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished with Patent Spring Beds, and Hair Mattresses affording very superior accommodations for families or single persons.

The Table is supplied with the best the market afford at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House Free of Charge. The House is open all night.

## P. M. S. C. O.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched in the month of September, 1863.

Sept. 13th, - - - Steamer Orizaba

Sept., 23d, - - - Steamer Golden Age

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.

And connect, via Panama Railroad, at Aspinwall, with teams for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidesdorff sts.



FOUNDRIES & MACHINE SHOPS.

**REYNOLDS'**  
Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

137 of these Invaluable Machines,  
ARE NOW IN USE  
In California and Nevada Territory, giving a perfectly  
regular motion and  
Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor**  
Is the CHEAPEST, SIMPLEST and QUICKEST to act  
and least liable to get out of order of any Governor in use.  
It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.

**Clark's Steam and Fire Regulator,**  
For controlling the Draft or Blast by opening the Chim-  
ney or Valve in the Blast pipe by the pressure of the  
steam in the boiler. It will regulate the pressure to a  
pound, on the square inch. It cannot get out of order  
and any person can put one up in an hour after the dam-  
per is put in.

**Ingersoll's Patent Drill Press,**  
With which drilling can be done the same as with the  
common ratchet, and when small holes are wanted, it  
can be done four times as fast. The handle can be wor-  
ked in any direction.

**Felt for Steam Boilers, Pipes, Etc.**  
At the lowest market rates.

**Steam Engines, Boilers, Pipes,**  
Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.

**Anti Incrustation Powder,**  
A Sure Remedy for Scale in Steam Boilers, without injury  
to the iron. In use for the past EIGHT years.  
Refer to—Sugar Refinery, San Francisco,  
Cottell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.  
**E. T. STEEN AGENT.**  
No. 33 Fremont Street, San Francisco.

**MOYNIHAN & AITKEN,**  
**Boiler Makers and Blacksmiths,**  
Mission, between Beal & Fremont Sts.,  
San Francisco.

**N. B.** All kinds of Boiler and Sheet Iron Work exe-  
cuted at the shortest notice, and on the most reasonable  
terms.

**PUMPS!**

**HARRISON'S**  
**California Lift and Force Pump,**  
WITHOUT VALVES OR PACKING,  
Suitable for Mines, Fire Engines, Wrecking or Irriga-  
ting. This is the Cheapest, Lightest and Most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

**ALL SIZES;**  
Capable of throwing from ONE HUNDRED to FIVE  
THOUSAND Gallons per Minute—For sale by

**C. H. HARRISON,**  
**PHOENIX OIL WORKS,**  
je-15 517 Front Street, San Francisco.

**50 lbs. MARINE and**  
**Fire-Proof Paint,**

**MANUFACTURED BY THE PACIFIC METALLURGICAL**  
Works in this city, for Hulls and Decks of Vessels  
from ground Mineral Rock contains Arsenic, Copper, Li-  
tharge and six other Minerals. When used on the Decks  
or Bottoms of Ships, it is equal to a coat of Stone,  
and quite equal to Copper, no worms will ever effect it,  
and cheaper than any other paint.

**DIRECTIONS:**  
For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur,  
three parts Mineral Paint, mix with Coal Tar and apply  
it hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes  
of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**  
When used on Roofs, Buildings, or Fences, it is equal  
to covering them with a coat of Stone, being perfectly  
Fire Proof, and costing less than any paint.

**DIRECTIONS:**  
**HOUSE**—Mix three parts Mineral Paint with one part  
white lead, thin with Linseed oil; if a lighter color is  
wanted, mix less paint, more lead.  
**ROOF**—Five parts of Mineral Paint, one part white  
Lead; mix with Linseed oil. Put it thick on a tin Roof  
as one coat when properly applied will last three years.  
**S. C. BRADSHAW, Agt.,**  
**G. T. TORQUE, Superintendent.**

**WORKS, North Beach; Office, 509 Sacra-**  
**mento st., San Francisco.**

FOUNDRIES & MACHINE SHOPS.

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:  
**GENUINE WHITE IRON SHOES AND DIES.**

**PALMER, HANSCOMB & CO.**

**To Quartz Miners.**

**Knox's Improved**  
**AMALGAMATING PAN,**  
WITH

**PALMER'S PATENT STEAM CHEST.**

**THE ABOVE COMBINATION SECURES THE MOST**  
complete amalgamation of the precious metals of  
any process now known.

By its steam is introduced in the most effective and eco-  
nomical manner, while it is peculiarly adapted to the  
catching of floating gold and silver, known to be other-  
wise lost. Made exclusively by

**PALMER, HANSCOMB & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. **W. A. PALMER.**

**JOHN P. GALLAGHER.....JOSEPH H. WEED.**

**GALLAGHER & WEED,**

**BRASS & BELL FOUNDRY**  
**AND**  
**LOCK FACTORY.**

No. 125 First Street, opposite Minna, next door to Pacific  
Foundry, all kinds of

**Brass and Composition Castings and**  
**Finishing, done with neatness and**  
**dispatch.**

**CHURCH AND STEAMBOAT BELLS, OF ALL SIZES**  
Made to order. Engineers Gongs made and hung  
in the best manner. Bank, Vault, Store and Prison  
Locks, also brass Padlocks and Shop Locks of various  
patterns, on hand and made to order.

Particular attention given to casting Rudder Braces  
and Ship Work in general.

All Jobs promptly attended to.—Prices  
moderate.

Removed from Oregon street, between Front and Davis.

**Miners' Foundry**

—AND—

**MACHINE WORKS,**

**First St., between Howard & Folsom,**

**SAN FRANCISCO.**

**EVERY DESCRIPTION OF IRON AND BRASS MACHIN-**  
ery, the Best and Most Economical, manufactured  
in the State of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:  
Steam Engines and Boilers, Flour, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgama-  
tors and Water Wheels—some in operation and on exhi-  
bition.

\* \* Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.

All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere

**HOWLAND, ANGEL & KING**  
San Francisco, February 23, 1863.

**San Francisco Machine**

....AND....

**IRON WORKS!**

North-east corner Fremont and Mission Streets.

**ALL KINDS OF MACHINERY MADE TO ORDER ON**  
most reasonable terms.  
Steam Engines, High and Low Pressure; Quartz  
mills, Saw mills, Mining Pumps, Hoisting machines for  
mining purposes, Wine Presses, Agricultural implements  
etc, etc, and Castings of all descriptions made to order  
Steam Engines exchanged and for sale by

**DEVORE, DINSMORE & CO.**

**REPAIRING promptly attended to.**

**FOR SALE.**

One Upright Post Drill, Putnam's manufacture, Al-  
so one thirty-inch screw Chuck.  
San Francisco, July, 1863. je13

FOUNDRIES & MACHINE SHOPS.

**VULCAN IRON WORKS COMPANY**

**P. Torquet, Manager,**

**STEAM ENGINE BUILDERS**

and

**BOILER MAKERS,**

**Iron Founders and General Engineers,**

**No 137 & 139 First street, San Francisco.**

Pumping, Hoisting, Mining and Quartz-crushing  
Machinery.

Shoes and Dies of the hardest iron,

Russia Iron Punched Screens.

Steamboat Machinery: Saw, Flour and Sugar Mills.

High and Low Pressure Boilers of all Styles.

JOURNAL and other Turbine Water Wheels with latest  
improvements.

**W. T. & J. GARRATT,**

**Gity Brass and Bell Founders**

**Cor. First & Market sts., San Francisco.**

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE**  
and Lift Pumps, Church and Steamboat Bells, Tay-  
ern and Hand Bells and Gongs, Hose and all other joints,  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PIPES and NOZZLES for MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.;  
COUPLING JOINTS OF ALL SIZES. Manufacturers of "Gar-  
ratt's Patent Improved Journal Metal.

**D. MORRIS,**  
**MACHINE SHOP,**

**227 Market, corner of Beale Street.**

Manufacturer of

**WARRANTED FIRE-PROOF SAFES**

Mill Work, of all kinds made to order. All kinds of  
Repairing done at moderate prices. je13

**LEWIS COFFEY AND RISDON,**

**STEAM BOILER AND SHEET IRON**

**WORKS.**

The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.

Old Stand, corner Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

**LEWIS COFFEY J. N. RISDON.**

**THEODOR KALLENBERG**

**Maker of Models**

**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosphi-**  
cal Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to.  
**No. 418 Market street, San Francisco.**  
47.3m

**HIRAM WRIGHT,**

**PICK MAKER,**

Has established a Manufactory for the Making of

**MINER'S PICKS,**

at

**NO 121 BUSH STREET, SAN FRANCISCO,**

[Between Sansome and Battery.]

WHERE can be had a superior Pick for Miners use  
As he manufactures all his picks under his own personal  
supervision, he warrants them as being made of the  
best material and by the best workmanship.

Orders attended to and filled promptly and with dis-  
patch. aug17

**WRIGHT'S PICKS.**

**JOHN WRIGHT,** of Sacramento, has established him-  
self in San Francisco, for the manufacture of every  
description of PICKS, of the best material, at reduced  
prices. Pick Eves of the best iron furnished in any quan-  
tity, at low rates. Orders from the country promptly  
attended to. **N. B.**—None genuine unless stamped with  
my name. **JOHN WRIGHT, 511 Market street,**  
Opposite Battery, San Francisco.

**CALIFORNIA TOOL WORKS!**

**John Weichhart,**

Manufacturer of

**All Kinds of Edge Tools, Etc.,**

Plane Irons

Moulding Irons,

Stone Cutter's Tools, etc

No. 22 Fremont street, bet Market and Mission,  
San Francisco, July 14, 1863. Jy 20

SILVER DISCOVERIES IN OREGON.

The *Dalla Journal* publishes correspond-  
ence from Wasco county Southern Oregon,  
announcing the fact that a large percentage  
of silver has recently been discovered to ex-  
ist in the copper ores of that vicinity. In  
addition to silver in connection with copper,  
regular silver ores have also been discovered.  
The correspondent alluded to says that these  
silver leads have been discovered since the  
1st of August, and that although none of  
them had been assayed, they have been suffi-  
ciently tested to warrant us in saying they  
contain a large percentage of silver. The sil-  
ver leads are known as the Barker lead,  
which resembles exactly the Comstock lead  
of Washoe; the Mammoth, the Home Tick-  
et, the Fulton and Pioneer leads, we are now  
prospecting, and as we go down, they im-  
prove in quality.

A great draw on the mines of that region  
is found to exist in the lack of facilities of  
transportation. The miners are talking of  
putting up furnaces for reducing their ores to  
regulus. They will find it a hazardous ex-  
periment, except it be done by parties of the  
fullest experience. Much confidence appears  
to be felt in the future value of that region.  
If such anticipations are realized, on a proper  
development of the mines, neither capital nor  
facilities for transportation will long be lack-  
ing.

**Eye, Ear and Throat.**

**DR. DE CASTRO,**

**Oculist and Aurist,**

**WHO HAS PRACTISED IN NEW**

York and all the principal cities of Europe with  
such unrivalled success, and from each place is pos-  
sessed of the most eminent testimonials, may be con-  
sulted upon diseases of these delicate organs, with a view  
to their permanent cure. Deafness of long standing thor-  
oughly cured. The Doctor employs his (by the Medical  
Society of London approved)

**Self-adjusting Artificial Tympanum,**

For the relief of deafness, attended by loss or injury of  
the membrana tympani, and for the cure of discharge  
from the ear—the invention of Dr. Castro, M. D., author  
of "Deafness Practically Illustrated as to its Nature and  
Treatment," etc.

The self-adjusting Artificial Tympanum was first intro-  
duced to the notice of the profession at the meeting of the  
Medical Society of London, on the 20th of November,  
1863. An animated discussion ensued on the reading of  
the paper, and several members of the Society bore tes-  
timony to the success of the remedy and the importance of  
the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-  
Adjusting Artificial Tympanum, as he had observed the  
immense benefit a young lady friend of his had received  
from it. She was in fact, quite deaf, and in a deplorable  
state; the effect of the tympanum was instantaneous—  
quite like a miracle. Five more testimonials from  
Members of the Medical College, New York, and the prin-  
cipal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and  
Kearny streets. Entrance on Market street.

**Mr. Editor—Having been afflicted**  
with deafness for the last two years, originating from a  
severe cold, and for the last month suffering from the  
most excruciating pains in my ear, I was obliged to come  
down to San Francisco to seek relief. After a physician's  
recommendation to wait on Dr. De Castro, on the corner of  
Kearny and Market streets, and underwent one operation,  
and it is with the utmost pleasure I can say my hearing  
was suddenly and without pain entirely restored. I deem  
it my duty to make this known to the public, and to recom-  
mend Dr. De Castro's skill as an aurist.

**JOHN REESE, Napa Valley.**

**James Callaghan, witness,**

**San Francisco, July 30th, 1863.**

[From the Daily Alta.]

San Francisco, June 30th., 1863.

**ED'S DAILY ALTA:**

Permit me through your widely circulated journal, to  
say, that my daughter Mary Ellen, has been afflicted with  
deafness since she was thirteen months old, and that she  
has been a member of the Deaf and Dumb Institute since  
it was organized. On taking her to Dr. De Castro, on the  
corner of Kearny and Market Streets, and undergoing un-  
der his direction, two operations, she has heard sounds  
very distinctly; and is now, I am happy to state in a fair  
way to get permanent relief. The result, thus far, is sat-  
isfactory; and I deem this notice due to Dr. De Castro for  
his skill; and would recommend all parties similarly af-  
flicted to give him a trial. My daughter has at different  
times been under the care of the most skillful physicians  
and aurists in California, but up to the period of visiting  
Dr. De Castro, received no benefit.

**CHAS JOHN P. WRIGHT,**

**812 Green Street.**

**APARTMENTS.**

**FURNISHED APARTMENTS, WITH, OR WITHOUT**  
Board, at 1018 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
home will do well to apply  
Jy8



## MINING NOTICES.

**Wide West Copper Mining Company, Office.** 528 Montgomery street, San Francisco, September 10, 1863—Notice is hereby given that an assessment of Twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, and payable immediately, in U. S. Gold Coin, to the Secretary, at the office of the Company, or to J. M. Pike, Superintendent, at Copperopolis. By order of the Board of Trustees, sep14  
M. G. ELMORE, Secretary.

**Ball Eagle Gold and Silver Mining Company,** Gold Flat District, Nevada Co., Cal.—Notice is hereby given that an assessment of Twenty-five cents per share has this day, (September 9th, 1863,) been levied by the Board of Trustees on the Assessable Stock of the above named company, and payable immediately in United States Gold Coin to the Secretary at his office, or to T. S. Smith, Superintendent, Grass Valley, Nevada Co. By order of the Trustees, sep13  
T. L. BIBBINS, Secretary, 105 Montgomery Street.

**Winona Gold and Silver Mining Company**—The first annual meeting of the stockholders of the Winona Gold and Silver Mining Company, will be held at the Company's office, No. 428 Montgomery street, for the election of five Trustees for the ensuing year, on the 19th day of September, 1863, at 7½ p. m. By order of the Board of Trustees, sep14  
M. G. ELMORE, Sec'y.

**Red Jacket Mining Company.**—At a meeting of the Board of Trustees of the above company held July 7, 1863, the first assessment of Five Cents per share on the capital stock was levied, payable immediately in United States gold coin, to the Secretary, office 420 Montgomery street, Room No. 2. By order of the Board, aug24  
J. W. CROSLY, Secretary.

**Office Table Mountain Copper Mining Company.**—At a meeting of the Board of Trustees of this Company, held July 25, 1863, an assessment of Thirty Cents per share was levied upon the capital stock of said Company, payable immediately in United States gold coin to the Secretary, at the office of the Company, No. 528 Montgomery street, or to J. M. Pike, Superintendent, at Copperopolis. M. G. ELMORE, Secretary, aug24

**Office of the Niagara Consolidated Gold and Silver Mining Company,** Elmore Canon—Notice is hereby given that the Board of Trustees have this day levied an assessment of Twenty-five Cents per share upon each and every share of the capital stock of the said Company, payable in U. S. gold coin immediately to the Secretary, at the office of the Company, No. 528 Montgomery street, or to the Contractor at the Canon. M. G. ELMORE, Secretary, San Francisco, July 20, 1863. aug24

## MINING LAWS AND FORMS

**JUST PUBLISHED BY H. H. BANCROFT & CO.,** being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth, \$1.50. For sale at all the Bookstores. sep14

**R. M. MYERS, & CO.,**  
Chases' New Mill, Fremont St., near Market,  
do  
**JOB TURNING & SCROLL SAWING.**  
BRACKETS,  
RED WOOD BANNISTERS,  
NEWEL AND ORDAR BANNISTERS  
for Stairs.

Manufacturers of every description of Oval,  
Circular and Square  
**PICTURE & LOOKING GLASS FRAMES**  
For the Trade at New York Prices.

All kinds of Designs for Building.

**BOOK KEEPING,**  
Penmanship  
AND  
COMMERCIAL CALCULATIONS,  
Taught by J. S. LUTY

**PRACTICAL ACCOUNTANT,**  
305 Montgomery Street, Corner of Pine.

**EXCELSIOR IRON WORKS,**  
712 Sansome street,  
Between Jackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,**  
Manufacturers of all kinds of  
Architectural and Ornamental Iron Work,  
Bank and Store Vaults, Safes, Doors, Shutters, Bal-  
conies, Area and Cemetery Railings, Gates, Stairs,  
Etc. and all kinds of Blacksmithing and Job-  
bing done with promptness, and at  
Reasonable Prices.  
Orders from the country promptly attended to.  
je13

## MINING CARDS.

**ALEXANDER STOTT,**  
MINING SECRETARY,  
512 Sansome Street, San Francisco.

Secretary of—  
HORSESHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

**T. C. Sanborn & Co.**  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**  
GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

J. F. MILLER. W. C. COLEY.

**MILLER & COLEY,**  
Stock Brokers & Mining Agents  
327 MONTGOMERY STREET,  
Between California and Pine, in Jerome Rice & Co's Real  
Estate Sales Rooms, San Francisco.

**ALL KINDS OF STOCK AND MINING  
Business attended to with Promptness  
and Dispatch**  
aug17

**L. F. LELAND,**  
STOCK BROKER,  
No. 621 Clay street,  
Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.  
Member of the San Francisco Stock and Exchange Board  
je-29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY  
**PEASE, BOWLEY & CO.,**  
Real Estate, Stock and Exchange  
BROKERS,  
621 Montgomery street, San Francisco.

**LEGAL TENDER NOTES AND MINING STOCKS,  
BOUGHT & SOLD.**  
je-29

**AGENCY**  
For the Purchase and Sale of  
**MEXICAN MINING STOCKS**  
At No. 411 Clay Street, San Francisco.  
**OFFICE OF THE PENA AND LA MARRONENA SILVER**  
Mining Companies, San Antonio District, Lower  
California.  
All persons are invited to call and examine Ores from  
the above mines.  
je18 WM. FAULKNER.

**New Bedford Copper Company.**  
THE UNDERSIGNED HAVING BEEN APPOINTED  
Agents for the above Company, are receiving regu-  
lar supplies of their superior manufactures of  
SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;  
Which they offer to the Trade at the lowest market  
rate, and on the most favorable terms.  
je-29 MORGAN, STONE & Co  
108 Front Street, San Francisco.

**R. W. FISHBOURNE,**  
PRACTICAL LITHOGRAPHER,  
ENGRAVER AND PRINTER,

NO. 529 CLAY ST., CORNER OF LEIDESDORFF,  
San Francisco. State and County Bonds, Stock  
Certificates, Bills of Exchange, Bills of Lading, Bank  
Checks, Landscapes, Architectural and Marine Views  
Show Cards, Labels, Etc. executed with neatness and  
dispatch. N. B. All orders in Crayon Work promptly  
attended to.

**MINING.**  
N. B. Mining Stock Certificates executed with prompt-  
ness and dispatch, and at greatly reduced rates. je6  
**MYERS & DAGGETT'S**  
Mining and Stock Exchange,  
No. 23½ B Street, Virginia City, N. T.  
Mining Stocks of All Kinds Bought & Sold.

Business connected with Mining Stocks of every descrip-  
tion promptly and confidentially attended to.  
\*\* Abstracts of Titles Furnished, Etc.

## BUSINESS CARDS.

**Napoleon Copper Mining Company.**  
Capital Stock.....\$1,620,000.  
2,700 Shares---\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher  
District, Calaveras county; Incorporated  
October 3, 1862.

President.....F. MACRELLISH  
Secretary.....R. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....A. W. HASKELL

TRUSTEES.  
F. MACRELLISH, of Alta California  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department.  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Miners.  
Office of Company, No. 420 Montgomery street.  
je29

**THE EUROPEAN  
ORE REFINING  
COMPANY.**

Quartz Mill and Furnaces, Bryant Street,  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF  
**ORES AND MINERALS.**

In large or small quantities, for such Experienced Treat-  
ment by the

**LATES EUROPEAN METHODS,**  
As may be ascertained by

**CAREFUL ANALYSIS,**  
At their works, to be the most Effectual in obtaining re-  
liable results, and afterwards converting whatever pre-  
cious Metals they may contain, into marketable Ingots.  
je-29 The South Park, and Folsom and Kearny Street Cars  
pass Bryant street. au31

**The Pacific Mineral Company**  
MAKE LIBERAL ADVANCES UPON THE ORES OF  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.  
Due account, taken of all valuable metals combined  
with Silver and Copper Ores, and advances made there-  
for.  
Parties owning undeveloped mines and desiring capital  
to prospect the same will receive assistance, if, upon ex-  
amination, such leads are deemed sufficiently valuable  
to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-1f Montgomery Street, San Francisco.

**MARTIN & Co.,**  
OFFICE---224 Montgomery Street, Up Stairs,

**WILL CONTRACT FOR THE  
Purchase of Copper Ores,**  
Assaying 8 per cent and upwards of Copper to the Ton.  
We will make ADVANCES upon Ores of COPPER, TIN  
and NICKEL.  
Sacks will be furnished and Freight Paid on all con-  
signments if desired by the consignors.  
HENRY MARTIN, J. F. GREENMAN,  
New York, San Francisco.  
San Francisco Post Office, Box 1259.  
je 1.

**San Antonio Gold and Silver Mines,**  
LOWER CALIFORNIA,

**FORWARDING & MINING AGENCY.**  
SAMUEL SMITH,

OFFICE—North West Corner of Front and Clay  
Streets, San Francisco.

**MINING MACHINERY AND MERCHANDISE FOR-**  
warded, Mining Claims secured, through the  
resident Agent at San Antonio, and information fur-  
nished regarding any claim, in that Territory, on Com-  
mission. je-26

**H. C. KIBBE,**  
MINING SECRETARY,  
Commissioner for Nevada Territory,  
512 Sacramento st., cor. Montgomery  
(ARMORY HALL.)

## BUSINESS CARDS.

**SOUTH PARK  
Quartz Mill and Reduction Works,**  
GOLD AND SILVER ORES WORKED AT REASON-  
able rates, and Working Assays made of small  
lots. All kinds of ores crushed at short notice.  
J. H. SMITH & CO.  
Office in Shiel's Block, opposite Masonic Temple,  
je13 S. F. CLOUSER, Secretary.

**W. W. HANSCOM,**  
Steam and Mechanical Engineer,  
Designs furnished, and Drawings made for  
Engines, Mills, Water Wheels, Mining Ma-  
chinery, etc., etc.,  
At Golden State Iron Works,  
aug X First Street, San Francisco.

**TO MINING COMPANIES!**  
Offices To Let.  
SUIES OR SINGLE ROOMS,  
in Government Block,  
N. W. Cor. of Sansome and Washington sts.  
au-24

El Paso District, Los Angeles County,  
**MINING AGENCY.**  
C. W. TAPPAN, GENERAL AGENT,  
"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines  
for a reasonable consideration.  
LETTERS OF ENQUIRY, containing Revenue or Postage  
Stamps to the value of fifty cents, and enclosing an ad-  
dressed envelope for reply, will be promptly attended to.  
The subscriber has a carefully prepared map of all the  
lodes in the district, a portion of many of which are for  
sale at very low figures.  
For further particulars he would refer to J. Bur-  
net, Esq., 425 Davis St., San Francisco Cal.  
El Paso, June 21, 1863. C. W. TAPPAN.  
au31

**MINING & SCIENTIFIC PRESS.**  
THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper  
commenced Sept. 11, 1862. It is intended that every  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits,  
together with several original engravings, of new inven-  
tions, etc., prepared expressly for its columns.  
This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietor to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published.

**The Mining Interest!**  
Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of Mi-  
ning Stocks, new inventions of Machinery adapted to that  
purpose, and of everything generally that may be of ser-  
vice to the Miner.

**The Inventor!**  
Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having had  
great experience as Patent Agents, together with facilities  
at Washington that enable them to obtain Patents  
with dispatch.

**The Mechanic and Manufacturer!**  
Will be greatly benefited by its perusal, as its col-  
umns will from time to time contain original engra-  
vings of new machines and inventions, together with a  
large amount of reading matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.

**To Chemists, Architects and Millwrights.**  
This journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of in-  
formation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plan-  
ters will not be neglected, engravings will be given of  
agricultural implements, and the farming interest gen-  
erally will be amply discussed.

**Terms.**  
To mail subscribers:—Four Dollars per annum  
**Club Rates.**  
Five Copies for Six Months, \$5.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Fifteen Copies for Twelve Months, \$44.  
Twenty Copies for Twelve Months, \$56.  
For all clubs of Twenty and over, the yearly subscrip-  
tion is only \$2 50. Names can be sent in at differ-  
ent times and from different Post-offices. Specimen  
copies will be sent gratis to any part of the country.  
**EWER & SMITH, Publishers,**  
Room 57, Government House, Corner of Washington  
and Sansome streets, San Francisco.



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, SEPTEMBER 21, 1863 NO. 47.

## REMOVAL.

The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing more room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.

## INVENTORS AID ASSOCIATION.

Ever since labor-saving machinery has played an important part in the production and development of wealth, it has been well known that many valuable discoveries have been kept long from public knowledge, by reason of the lack of pecuniary means on the part of inventors. It is not unfrequently the case, also, that important inventions are thereby entirely lost to the world. To obviate such an evil and to foster and encourage inventions and industrial pursuits generally, an Association has recently been formed in Paris, known as "The Society of Credit for Inventors," which has for its object the assistance of inventors, by furnishing those who have made valuable inventions, but have not the ability to bring them out, with the pecuniary means for doing so. The Association is a kind of Banking Institution and its action is regulated by two Boards of Officers; the first consists of scientific and practical men who pronounce upon the technical value of an invention or improvement; the second Board estimates the probable prospects of the same in a financial point of view. The two Boards, in conjunction, as they deem it necessary can call in competent persons, experts, with whom to advise in matters upon which the Board may not feel themselves thoroughly informed. Of course, the losses which must sometimes occur, will be met by the large interest obtained from successful operations.

Much benefit is expected to be derived from this Association, in the stimulus which it will extend to national genius, and national values which will thus be created in the field of mechanical research and improvement. The idea, we believe, is new; it is certainly generous and noble. Under its workings true merit can scarcely fail of its reward. We have often seen the need of such an institution. Indeed, as we write, we have our mind upon some two or three inventions in our own State, of the most undoubted value, which are remaining at rest, from the lack of means on the part of inventors to properly bring them out. Two of them are full of promise of the utmost importance to the great mining interest of the State. Of all countries in the world our own is most in need of such an institution. Such an enterprise, properly managed, could scarcely fail of being a good investment to stockholders, and a healthful stimulus to the genius for discoveries and invention so characteristic of our people.

## HYDRAULIC MINING.

We notice a well written and suggestive article in the Sacramento *Union* of the 18th instant, on the general subject of Mining on the Pacific Coast, in which Hydraulic Mining is mentioned merely incidentally. Wonderful as are the developments which the writer of that article truly describes as being made in the search for the precious metals in their native lodes of quartz, the deep placer diggings, now so extensively being worked by the application of hydraulic power, are worthy of more than a mere passing notice.

For the first few years after the discovery of gold in California, nearly all the precious metal was taken from surface, or placer diggings. Millions of dollars were taken out mostly from these shallow deposits. Of late years this class of diggings has been dropped by white men as unprofitable, and has now nearly all passed into the hands of Chinamen.

As these shallow diggings began to give out, the miners gradually opened up a new class of deposits known as "deep diggings," which are worked by a new process first introduced into practice in California and known as hydraulic mining—a process too familiar to most of our readers to need a description. The more shallow and most easily accessible of this class of diggings were first attacked, and with very good success, by a low pressure of water. As these diggings were traced further and still further into the hills, a larger volume of water was needed to break down the banks, and a higher pressure, partly from the less yielding nature of the gravel and in part from the necessity, as the bank before the miner increased in height, that the pipe-man should stand at a greater distance from his work to secure safety from the caving down of the gravel, as he undermined the same with his stream.

In order to meet this constantly increasing emergency, various devices have been resorted to for strengthening the hose so as to make it stand the desired pressure. Double and treble thicknesses of canvass have been employed at great expense, and galvanized iron hoops have been contrived for the manufacture of "crinoline hose," as it was termed; the expedient of securing hose by winding it with small ropes has also been attempted, but all without any decided degree of success, for various reasons, which it is unnecessary to enumerate here. The developments of this branch of mining are most important and interesting, and the progress in that direction thus far, encourages us to hope for an almost uninterrupted extent of these deposits. Our deep diggings are very much like our quartz mines in the nature and immediate consequences of their developments—The more, thus far, we have opened them, the more extensive are the proportions which they assume; and even now more ground of this description has been proven than can be worked out in the next fifty years. At this time and forever henceforth, the chief part of the gold from our placer mines must come from the "Hydraulic diggings." The only serious drawback to this class of mining is the difficulty encountered in obtaining hose of sufficient strength to stand the immense pressure necessary to prosecute this work with success in deep ground and in hard, cemented gravel. It has, for some two or three years, been held a *desideratum* of the greatest

magnitude to contrive a hose which shall be light and flexible, so as to be capable of convenient use and at the same time possess the capacity of resisting the pressure to which it is necessary to expose it. Any person who can accomplish this object will do as much to advance placer mining, as McCormick with his reaper has done to advance agriculture. There is money—there is fortune in the idea. A more worthy object for a leading prize at our State Fair could not be mentioned.

## CALIFORNIA COPPER SMELTING WORKS.

The first result from the Copper Smelting Works at Antioch came down on Monday last in the shape of a bar of copper, the first copper ever obtained outside of a crucible, on the Pacific Coast. Any doubt which may have hitherto existed with regard to the suitability of Mount Diablo coal for smelting copper has been removed by the success thus attending the first "firing up" of this furnace.

The field of success seems now fully opened to the Company, and the only obstacles in their way, other than those of their own creating, will be such as are always incidental to even well understood undertakings attempted in untried localities and under ordinary changes of circumstances. The introduction of a new industry into the State, and one of so great importance and complexity as the one just initiated, is not to be fully accomplished except upon much thought and the exercise of the most mature judgement.

Too much credit cannot be given to the indefatigable Secretary of this company, R. W. Emerson, Esq., who has conceived and brought to a successful state this important enterprise.

The stockholders of this company, are not the only parties who are interested in a favorable result. The entire California public are watching with much interest the developments which this company is making in a branch of industry, which if successful, will open up an almost illimitable field for the employment of capital, and add millions of dollars to the value of a most important class of mines, which are just now beginning to be opened up among us.

There are numerous mines of low and peculiar grades of ores, already opened and to be yet discovered, which can never have any value except upon the hypothesis that the ore can be smelted here. Every mine property in the country is interested in the present experiment; as there is no mine which does not turn out much ore that will never pay either for shipment or transportation. The pioneers in this enterprise may be considered in the light of public benefactors. We shall watch with much interest the further development of these works.

SPECIAL NOTICE.—MR. LEIGH HARNETT has been appointed our Special Agent to visit the Counties of Calaveras and Amador, to make collections and solicit subscriptions for the MINING AND SCIENTIFIC PRESS. Mr. H., who is a thorough practical miner and well skilled in the use of the pen will also act as correspondent, and furnish much valuable information with regard to the copper mines of those important counties. We bespeak for him a cordial reception from our mining and other friends.



## OWEN'S RIVER CANAL COMPANY.

This company has been incorporated for the purpose of constructing a canal in Owen's River Valley in the Counties of Mono and Tulare, State of California. Its object and prospects are fully set forth in the following Prospectus just issued by the Company.

The principal object is to furnish motive power to work the vast number of Mineral Lodes, in the Inyo, and Russ Districts, (situated in the Inyo Mountains, on the East side of Owen's River, commencing at the foot of Owen's Big Lake, extending thence northwardly the entire length of the Lake and (River,) also with a view to the transportation of wood and lumber, from the timber regions at the head of Owens River, to supply the Mining and Agricultural wants of the country along the line of the canal and adjacent thereto.

The scale on which the canal is planned is sufficient to admit of its employment as a means of transportation. A careful survey has been made by J. E. Clayton, a competent Civil Engineer, employed for that purpose. A Lithograph Sketch of his plan, and some brief statements based upon his report, or some extracts from it will give the reader some idea of the work, feasibility, costs, and results.

"I found," says Mr. Clayton, "the point selected by Messrs. Lambeth & Whigham for the mouth of the canal, exceedingly well adapted to taking the water from the river, commencing as it does at the southern extremity of an arm of the river, forming a natural canal for nearly one-half mile, and about one and a half miles above the new town of San Carlos, on Owen's River. The Arm or Slough, as it is sometimes called, has high banks which are never overflowed by the highest stages of water. The river is very narrow, at its junction with the slough or natural canal being not over sixty (60) feet wide, and the most feasible point for the construction of a dam on the river. You will find it marked on the sketch as Initial Point, showing the level of the river as found at that date—November 20, 1862."

The singularity of this river is that it discharges a constant volume of water, being fed only by springs and the gradual melting of the snows, annually deposited upon the Sierra and Inyo mountains, whose tops rise to the height of 4,000 to 6,000 feet above the level of Owen's Valley, which is a beautiful valley formed by alluvial deposits from those two great ranges of mountains, and averages about ten miles wide, and 140 long. It contains by Government Survey, 592,040 acres, 200,000 acres of which is splendid agricultural land, all of which has been surveyed and sectionized, and the Plats returned to the Land Offices, at Visalia and Stockton, a copy of which can be seen in the Company's Office.

Through this valley flows the waters of the Owen's River, which takes its rise in Mono county, about 40 miles southwest of Esmeralda, on the Eastern Slope of the Sierra Nevada, and in the midst of a dense forest of Pine, Fir, Tamarack and Oak, which line its banks and extend back for many miles, showing that an unlimited supply of timber is here to be had for the country lying South, which is now destitute.

It then meanders through this valley, with a gradual descent of about 20 feet to the mile for a distance of 140 miles and empties its waters into Owen's Lake. It is said to be navigable for steamers of 75 tons burthen, (after the contemplated improvements are made,) at the lowest stages of water, and will afford, at all seasons of the year, an unlimited supply of water for Mining, Milling and Agricultural purposes. And, unlike most rivers in California, the supply is greatest in the summer season, the time it is most needed, and never subject to sudden rises, which is an admirable feature of this enterprise.

We will now show by facts and figures to all parties interested in the Owen's River Mines, the great advantage to be derived by every owner of "feet," and the owners of canal stock, when this great enterprise has completed the first five miles of the canal. The Steam Mills now working in Russ District, find by actual experience that their motive power for a ten-stamp mill costs \$60 per diem, or \$6 per tun for each tun worked, to say nothing of the many other contingent expenses, which are continually occurring where steam is used as a motive power.

The Canal Company proposes to furnish water for a motive power at one sixth of that cost, or for one dollar per stamp, and perhaps less.

According to the estimate of J. E. Clayton, the engineer of the Company, there will be a sufficient volume of water in this canal to run fifty mills of 20 stamps each, making a total of 1,000 stamps. We have no hesitation in saying that in a

few years, all the water to the full capacity of the canal will be required.

Allowing 20 days as the running time of the mills per month, one mill of 20 stamps, would give a monthly yield of \$400.00.

For 50 mills of 20 stamps, .....\$20,000.00.  
Allow for salaries of officers and employees, repairs and other expenses, ..... 2,000.00.

The net result would be ..... 18,000.00, or \$216,000.00 per annum.

The returns from the motive power would soon re-emburse the first cost of the work.

Other sources of income from the canal—transportion, irrigation, lumbering, etc., need only be referred to.

It is no stretch of the imagination to suppose that fifty mills, of twenty stamps each, will be in operation inside of a few years, when we turn to Washoe and see there, to-day, one hundred mills in operation, some of which have fifty stamps, and still more are being built.

We here quote from the Territorial *Enterprise* the following statistics:

"The number of Mills in Nevada Territory is 100, ranging from five to fifty stamps each, which are in constant operation.

The following amount of treasure has passed through the office of Wells, Fargo & Co., at Virginia from April 1, 1862 to July 1, 1863.

For the quarter ending April 1, 1862,.....	\$270,000.
" " " " " July 1, " .....	570,000.
" " " " " Oct. 1, " .....	800,000.
" " " " " Jan. 1, 1863, .....	956,000.
" " " " " April 1, " .....	1,270,000.
" " " " " July 1, " .....	1,600,000.

Total amount for the past eighteen months, \$5,466,000.  
Estimated amount of the yield of bullion on the eastern slope for the year 1863:

Virginia City,.....	6,000,000.
Silver City and Gold Hill,.....	10,000,000.
Empire, Ophir and Dayton, .....	8,000,000.
Esmeralda, .....	4,000,000.
Reese River and Humboldt, .....	2,000,000.

Total, \$30,000,000.

All ores working four hundred dollars and upwards are shipped to San Francisco."

It is confidently asserted by intelligent parties who have made it their business to examine the mines, and the resources of all those vast mineral regions, that Owen's River is not second to Washoe in its future prospects and destiny.

To assure the Public that this Stock has an intrinsic value, and that the Company will be in a condition to pay dividends, at an early day, the trustees have set aside to be sold on account of the Company, 3,000 shares of full paid, or unassessable Stock, and 2,000 shares of assessable, the proceeds of which shall be applied to the completion of the works.

The office of the Company and its place of business is in San Francisco, 328 Montgomery street. A. J. Downer & Co., 406 Montgomery street, are the authorized agents of the Company, who will dispose of the Stock in such quantities as may be desired—and give such information to parties wishing to invest, as they may require.

We would here beg leave to call attention to the fact of the trustees having set apart the one-half of the capital stock to be sold on account of, and for the benefit of the Company. It is obvious, that a Company with such large resources in the way of marketable stock, will seldom if ever be obliged to resort to assessments to prosecute the work. In no case, is it reasonable to suppose that there will be more than ten per cent. of the capital stock called in by assessments, and that would be at such intervals and in such amounts as not to be felt by the owners of assessable stock.

Estimated cost of ten miles of the work, as made by J. E. Clayton, civil engineer:

Dam in the river,.....	\$2,500.00.
Lock and flood-gate.....	2,500.00.
Iron and smith-work,.....	500.00.
Lumber for waste-gates and various other purposes—30,000 feet, @ \$150 per 1,000 feet, .....	4,500.00.
Excavating the first section of five miles to De Bend City—4 feet deep with an average width of 27 feet, 105,600 yards @ .30, .....	31,680.00.
Excavating 5 miles, additional, to a point at the Union Lode—105,600 yards @ .30, .....	31,680.00.
For improving the cañon 15 miles,.....	60,000.00.
One Saw Mill, in running order,.....	15,000.00.
Contingencies, .....	15,000.00.

Total Cost of 10 miles of Canal, and river

improvements for 15 miles, etc., ..... \$163,360.00.

It is manifestly evident that this Canal when completed will furnish motive power for running a quartz mill at a cost of not more than 25 per cent. that of steam power. This would be a saving to any company working a ten stamp quartz mill in Owen's Valley of full \$40 per day, or \$800 per month of twenty working days. This saving upon the cost of steam power would enable a company having a paying lead in that vicinity and a ten stamp mill propelled by water from this canal to make a dividend of one per cent. per month, on a capital of \$80,000. This additional value of the stock of the mining company would give an enhancement of \$40 per foot upon a mine of 2,000 feet mining ground. The increase of value to the mine upon a large scale of operations can be readily perceived.

[From an Occasional Correspondent.]

VIRGINIA CITY, SEPT. 12, 1863.

On my way over here I stopped at the Zinc House Mines and was almost astonished to see some of the good looking ore being raised and sacked. The remembrance of a former excitement, of surface gold diggings in that neighborhood, had prepared my mind to doubt all their pretensions. I obtained a few feet in two different locations in which some of the leading Bankers of Sacramento City and Nevada County are owners.

I was sorry that I did not possess an agency for your valuable paper, whose claims I *ably* advocated, and no less than two parties promised to raise a subscription club and send on.

I had a clipping in my memorandum book, on "Copper Ores and Prospecting for Copper," that would really have been worth to some of them the whole price of one year's subscription.

An old lady friend was eager to know if a certain heavy specimen she exhibited to me was not silver ore.

The application of a pocket magnet showed unmistakable indications of iron. At their mine near the House, were three classes of rock saved separately and each class suspected of being mineral and perhaps rich; but in what metal they knew not. Why all this suspense and laboring in doubt, when by their using the plain instructions given from time to time in your paper, and by an outlay of not more than one dollar for chemicals, they can make scores of tests as to the quality or kind of mineral they are handling; and by a little practice will find it sufficiently accurate as to quality for all purposes of the prospector? You need a good traveling agent all the time on the miners' trail, or rather I mean the miners all need just the information given in the *SCIENTIFIC PRESS*, and I fear will not know of the paper only through an agency.

I would hint that it is my opinion that the Pocket Magnet could be used much by our prospectors, where it is now used but little. For example, in my little trip over toward Walker River, S. E. of Virginia City, about 38 miles, in the new district called "Silver Lake," I carried only a small horn and a small pocket magnet.

During the first afternoon, I and a companion from your city, visited the principal claim owned by Washburn & Co., and on returning to camp, found much float mineral rock. My companion filed a caveat on these good indications, and left that evening for Virginia City, with samples for assay. The next day, solitary and alone, I strolled around the hill sides, finding more and far richer samples and masses of the same. I broke off with my hatchet some good samples and pulverized them on a smooth rock. But lo! the mischievous magnet coveted every particle of sulphuret. Yet I carefully took the whole sample along until I found a little spring and there horned off the light and took new proof that it was iron and sulphur and a little mica which had given it somewhat the appearance of horn silver. The other party gave five dollars for a fire assay which gave no button of any kind.

This new district now centers in the Washburn claim which has an immense chimney of quartz cropping out 4 or 5 feet high and 8 or 10 feet wide. The croppings assay over thirty dollars. The character of the rock is argenteiferous galena. They are about to drift through the ledge about 30 feet below the surface, and are quite sanguine of a big strike. I hope they may, for they seem worthy of good success.

Galena, if it is not rich enough to smelt, has not hitherto been worked successfully by our wet processes. This is now one of our problems to solve. Some of the experts say lime added will change the lead to a carbonate of lead (white lead Pb O, CO<sub>2</sub>). I think I will go out to Reese River this fall.

B. W. C.



# ASSAYS!

Promptness and Accuracy Secured  
By the Use of the Most Improved  
Methods of  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

J. H. CHURCHILL, M. A.,  
(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. Jy 6

# THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

## ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

## METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

## EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

## EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

## BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1880, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed being cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino.

MANUFACTURED ONLY BY  
**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

nos 125 to 136 First street, and 126 to 144

Fremont street.

I. C. E. KLEPZIG & CO.,

# GUN MAKERS,

...AND...

DEALERS IN GUN MATERIALS,  
733 Washington street, San Francisco,  
(One Door above Kearney street.)

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Ekland. Je 21

## WANTED,

GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,

By FRONTIER A. DEVERCY,

au31

437 Pine street, San Francisco.

John R. Sims,



Oregon street, between Washington and Davis and Front and Jackson streets, San Francisco.

Manufacturers of Fire Proof Doors and  
Shutters, Bank Vaults, Grating, Cemetery Railings. All orders from the Interior of Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

Mr. Sims Appreciates the Past  
liberal patronage of his friends, and trusts that he may continue to merit it in the future.

For the Information of Strangers  
he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attests. A large assortment of second hand shutters for sale at low rates. ap13

LEANDER RANSOM,  
Civil Engineer  
AND

# SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

## ALSO

# STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL  
LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE: Second floor of Express Building, N. E. corner of Montgomery and California streets. oct-3m

# D. NORCROSS,

Masonic Temple, No. 6, Post Street.

Military Goods of all Descriptions.  
Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.

aug 17

# FOR SALE.

PATENT PRESSED RUSSIA IRON MINING PANS.

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bubb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Frut Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

UNEQUALLED

MONITOR COOKING STOVE

Or RANGE,

FOR HOTELS.

To which we call particular attention.

je-25

TAY, BROOKS & BACKUS.

THE OPPOSITION STEAMER, MOSES TAYLOR, will leave this port on the 3d. of October, Passage has been fixed as follows:—

Staterooms, upper deck saloon, \$160; main saloon, \$135; second cabin, \$90; steerage, \$60.

CHANGE OF ROUTE.—In consequence of the extreme low stage of water on the San Juan river, notice has been given that the Moses Taylor, in her next trip will run direct to Panama. Passengers will be promptly taken across to the steamer on the other side, which will be there to receive them.

The steamship America, of the Nicaragua line, is to be overhauled and repaired, and sent to the Pacific to run in connection with the Moses Taylor. The Illinois and Retribution will be the connecting steamers on the other side. The first named is announced for October 3d. The Company is constructing a new dock on the Jersey side of the river, at a cost of \$100,000.

Passengers who have traveled by this route speak in the highest terms of the accommodations, and of the gentlemanly conduct of the officers of these steamers.

NEW INVENTION.—Ira D. Card, one of the most promising inventive geniuses on the Pacific Coast, has just completed a machine for Tire Upsetting, which by the aid of a lever, will bring to the desired circumference, almost instantaneously, the most obdurate cart wheel in use. Mr. Card will exhibit the machine at the Fairs which soon take place at Stockton and Sacramento. Letters Patent for this machine were obtained by Ewer & Smith of the MINING AND SCIENTIFIC PRESS Patent Agency.

G. E. MOORE,  
Assayer and Analytical Chemist,  
No. 612 Sacramento Street,

HAVING ESTABLISHED A CHEMICAL LABORATORY, furnished with every requisite for delicate Analytical work, is prepared to execute the Assay and Analysis of Ores, Mineral Waters, Guanos, etc., with accuracy and dispatch.

## REFERENCES:

Prof. J. D. Whitney, State Geologist, San Francisco.  
Alsop & Co., San Francisco.  
Sather & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento. sep14

PEOPLE'S  
OPPOSITION  
Steamship Line!  
Connecting California and New York  
VIA NICARAGUA.

GREAT REDUCTION IN RATES!!!

750 Miles Shorter than Panama Route!

The Fast and Favorite Double Engine Steamship,

MOSES TAYLOR,

J. H. BLETHEN..... COMMANDER

Will be dispatched for

SAN JUAN DEL SUR,

From Mission street Wharf.

SATURDAY, - - - OCTOBER 3, 1863

Punctually at 9 o'clock, A. M., on

Connecting at GREYTOWN with the Splendid Steamship

ILLINOIS - - - - - 2500 Tons.

The Moses Taylor, since her last trip has undergone the most extensive repairs. Her decks have been extended forward and aft; cabins enlarged, refitted and repainted throughout—making her accommodations equal to any Steamer on the ocean.

Every arrangement has been made by the Central American Transit Co for transporting passengers across Nicaragua in a few hours.

For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco, west of the P. M. S. Co's. Office, also T. Boyce.

BOOK KEEPING,  
Penmanship

AND  
COMMERCIAL CALCULATIONS,

Taught by J. S. LUTY

PRACTICAL ACCOUNTANT,

305 Montgomery Street, Corner of Pine.

RIEHN, HEMME & CO.,  
ASSAYERS.  
Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.

Assays Made of ores, Minerals  
and Metals.

## REFERRED WITH PERMISSION TO

THOMAS F. PARROT & CO., | MOSES ALSOP & CO.,  
R. B. SWAIN, Esq., | DONOHOF, RALSTON & CO.

THOMAS F. RIEHN, late U. S. Branch Mint, gives Lessons in Assaying, also in Mineralogy and Chemistry as far as required to become a practical Assayer.

BAUNCHEIDTISM,  
THE PRESERVER AND PRODUCER OF LIFE.

THE EFFECT OF BAUNCHEIDTISM AS A METHOD OF curing disease, is a "fait accompli" in medicine, and needs no more proof. The public has crowned Bauncheidtism already with an extraordinary patronage, and it is acknowledged by all men of science that BAUNCHEIDTISM is founded on a rational, scientific basis. It can safely, and with sure success be applied to paralysis in consequence of Apoplexy, Podagra and Rheumatism of every description, which kind of complaints can find their only relief by the above method. Especially can it be applied successfully, in the spring of the year to diseases of the eye.

Dr. Borchers is the only doctor in California who has the original series of Dr. Bauncheidt's and his original U. S. Dr. Borchers is also in possession of original letters of the inventor of the method by which he can prove that he is perfect master of the latter.

DR. J. C. BORCHERS.

No. 19 Kearney street, and No. 4, Mark's Place, First  
tory, No. 5. Office hours from 9 to 11 A. M., and 1 to  
and 7 to 9 P. M. je-21

WILLIAM BRODIE & CO.,  
CALIFORNIA FOUNDRY,  
Fremont Street, near Market, San Francisco.

Light and Heavy Castings,  
of Every Description, Made to Order. Particular attention paid to all kinds of House Work, Plumb and Ornamental. Jy13

## Giffards Injectors,

FOR SUPPLYING BOILERS WITH FEED WATER without Pumps. No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODDART, Agent,  
je22 Cor. Pine and Front Sts., San Francisco.

PATRONIZE  
HOME MANUFACTURES!!!

James Longshore,  
Trunk and Valise Manufacturer,

47 Sansome Street, under Tehama House. Trunks and Valises, Wholesale and Retail, Fine Sole Leather Trunks, Valises, and a fine assortment of LADIES' TRUNKS constantly on hand. Trunks covered and repaired. aug x

New Style of Ladies' Buckle!

W. BOHM,

INVENTOR AND PATENTEER.

THE SUBSCRIBER HAVING OBTAINED LETTERS Patent from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any her in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years, excels all other buckles in

Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of  
BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.

JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.

FLOBERG & CONTRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm," will be warranted as to its Strength and Durability.

W. BOHM, Patentee.



## REESE RIVER.

The special excitement of the day appears to be Reese River. The daily reports from this interesting locality are really quite exciting. The rush thither, notwithstanding the near approach of winter, increases rather than diminishes. Not only from Washoe, California and Oregon, but also from Salt Lake, crowds of men women and children are pressing into this new silver land. A late Virginia paper records the fact that the day previous not less than 60 names were booked at that point for Austin, the central point of the Reese River region. Many go there with limited means, in the hope of acquiring fortune by accident rather than by systematic prospecting or labor. Good leads, in great abundance, are no doubt already opened, and many more are to be discovered; but there is little probability, that more than one in ten of those now going will be counted among the lucky ones. It is too distant and expensive a country to prospect in without means, and there is not yet sufficient capital there to open, even to a limited extent, (and thereby create a demand for labor) a tenth of the leads already known.

Let those who contemplate going there defer their trip till next spring. But little can be done there this fall or winter, and the cost of living in that distant region will be very high, to say nothing about the extreme difficulty that will no doubt attend the procurement of proper shelter, even with an abundance of means at hand. It is feared that much suffering will be encountered there during the coming winter. Most of their flour comes from Salt Lake, a most precarious base of supplies.

## THE MINERS AND MILLS.

We do not make these remarks from any lack of confidence in the mines. We have the utmost faith, not only in their richness, but in their extent as well. We are fully satisfied that Reese River will prove fabulously rich in silver, and will soon become second in importance to no mining district on the globe!

There are now recorded and located in the mining districts of Reese River about 1,300 different mining companies. Nearly half are separate ledges. Mount Hope has about 75 companies; Ravenswood, 85; Simpson's Park, 230; Big Creek, 250; Smokey, 350; Summit, 100; Santa Lee, 70; Grass Valley, 15; Union, 20; Cortes, unknown. Numberless new ledges are being discovered and new towns are springing up as if by magic.

Four mills are now constantly running at Austin and Clifton, and one on Big Creek Cañon, and all crushing rock that pays extraordinarily rich. The value of ground in all these districts has advanced enormously within the past two months, with decidedly upward tendency. These mills have already sent down a number of most unmistakable "indications" in the shape of good sized "bricks," of high assay. Two other mills will soon be in operation in that region. Of course these mines are as yet but slightly developed. Most of them have had only the few days of work done upon them necessary to hold the claim until another year. Others have been stripped along the surface, merely to show the continuity of the ledge, and to get out a few tons of croppings for a test crushing. A few have been opened a depth of a hundred feet or more, by tunnel or shaft, but what is of the greatest importance, nearly all that have been tested by practical process, have even exceeded all anticipations, and the bricks that are now being turned out daily, are such tangible evidences of the value of the mines as to convince even the most skeptical.

## CAPITAL GOING THITHER.

Capital is fast finding its way into this region, and not a few men of means are quietly at work buying up claims, some for permanent investment, others for speculative purposes. A large amount of European capital is also seeking employment there. A degree of confidence has already been established which gives high hope of an early and rapid development of the resources of this new Silver Land.

## TELEGRAPHIC COMMUNICATION.

True to the instincts of the great American people, the practicability of a telegraph has already been looked into, and a connecting link with Humboldt and the rest of mankind may be looked for early the ensuing season,

## CLIMATE, LABOR, ETC.

Snow falls at Austin sometimes to the depth of five or

six feet. The winters are not excessively cold, however. The summers are pleasant and agreeable. There is an abundance of grass for stock. Horses and mules are ranches and properly looked after for one dollar per week. They may also be turned loose, and obtain a very good living, but under such circumstances they are liable to change hands suddenly. The price of labor at Reese River is about the same as at Virginia City. Persons going thither can go most economically with their own animals. The distance from Sacramento is about 340 miles and can be made on horseback in about twelve days. Those who go there, the present season, should be amply provided with funds. Prospecting will soon be over with until next spring. Those who go to speculate in "feet" or to erect mills, will do well to go at once. Great numbers of owners of feet will soon be sadly in need of dollars.

## THE MINES.

Buel & Co's Mill appears to be particularly busy, and is turning out large quantities of bullion. In addition to the ore from the Yankee Blade and Union No. 2, alluded to in our last, as worked at this mill, the *Reveille*, of a later date, contains the following:—

On Wednesday the 2nd inst., there was shipped from Buell & Co's mill, 1,030 ounces of bullion, the yield of nine and a half tons of Yankee Blade rock; and 437 ounces from three tons of Union No. 2. This bullion was worth about \$1 30 per ounce.

On the 11th inst. a brick, weighing 200 ounces, was received in Virginia City, the product of a small crushing from the Manhattan Company.

We clip the following items from the *Reveille* of the 5th inst.

The Austria is selling at \$12 to \$15 per foot; the Zouave at \$15 to \$20, and Golden Era at \$20 to \$30.

Ario ledge, near North American, is 150 feet wide on the surface, and assays \$3,000 to the ton.

Eclipse rock, 14 feet below the surface, presents numerous flakes of native silver, with other forms of the precious stuff. The ledge is three feet wide and rapidly improving.

Sada Redfern is the name of a new discovery, made just above Paul street; ledge three feet wide, and rich. They came on it while digging post holes.

Vineyard ledge, a new discovery, has created much excitement recently. It is three feet wide and quite rich; extensions have been taken indefinitely.

Three pounds of Flora rock worked by hand process yielded over one ounce of pure silver.

We have seen quite a handsome button of silver from five pounds of rock of the Gen. Meade ledge, a new discovery at Big Creek. It was quite promising indeed. The shaft on the Josephine is down twenty feet, and a tunnel has been run to and through the ledge, which is twenty feet wide, and will work over \$200 in the mill. Canon City is still improving in a permanent manner.

MIND YOUR QUARTZ.—Owners of the Governor Moreton took a specimen of their waste rock last week and had it assayed. The result was \$295 50 to the ton in silver. The rock tried was a conglomerate casing of a dirty grey color, appearing for the world like old ashes. Hence we come to the gratifying conclusion that silver may be found here even in the dirt or mixed cases of ledges as well as in the quartz, and that it is best not to waste any quantity which will test so largely, no matter how indifferent it may look.

SANTA CLARA.—Considerable attention has been drawn towards mining operations in Santa Clara county. They are running the second tunnel in the Capitola claim, after having struck the lead in the old tunnel at a depth of fifty-seven feet. Several gentlemen from Copperopolis have recently visited locality, who represent the Capitola rock to correspond well with that taken from the mines at Copperopolis. The Company is in about sixty-five feet, and the indications are constantly improving. The stock is principally owned in San Jose. The claim is located about eleven miles from San Jose in a south-westerly direction, and one mile above the Ten Miles House, (Beatty's,) on the south side of Los Gatos creek:

THE PROVIDENCE COMPANY:—This company's mine is located in Nevada county, about two miles below Nevada City, on Deer creek—the third cleaning up, from their mill has been shown us, and consists of a gold bar worth seventeen hundred dollars. No assessments have been levied by this company; their mill and workings have all been paid for by the yield of the mine. Eight stamps are now to be added to their mill, making a total of sixteen. We are pleased to notice the prosperity of this company; as it proves that we have good mines near home, and shows us what good management can accomplish in quartz mining. We predict a dividend in a short time by this company.

## THE MINING SHARE MARKET.

The Mining Share Market has exhibited no peculiar features during the week. The depression, heretofore noticed, still continues, although a fair amount of business is reported in leading stocks.

Ophir has been dealt in to the extent of 156 shares at prices slightly improved from the closing rates of last week. The damage done to this mine by the recent cave has now been fully repaired, and the main shaft or incline, is the best in the Territory, having been much improved and enlarged. Work upon the rich seam in the lower gallery was recommenced on the tenth instant. Rich ore is still being extracted from the new vein. None of the rock from this vein has been sent to this city for working, as heretofore reported. The Company possesses every facility at their own mills for working anything which comes from the mine. The "cave" has been a fortunate circumstance for the Ophir. By it the Company gained a new and splendid incline, an improvement which the dilapidated condition of the old one would have soon rendered necessary, and in consequence a new vein was struck, which has more than paid all expenses, taking into consideration both the time lost and the cost of improvements.

Gold & Curry shares have met with an advance of fully \$600, over last week's sales. This advance is owing to the very satisfactory report of the Board of Directors who have recently visited the mine. Most important additions are now being made to this Company's mill, to meet the increasing demand of the mine upon the reduction works. Latest accounts are to the effect that two new boilers had just arrived, each 24 feet in length, and each weighing 7,270 pounds. Three more of the same size and weight are yet to arrive. All these boilers will be used to drive the new two-hundred-and-fifty horse power engine soon to be erected to drive the amalgamating apparatus in the company's mammoth mill. This new machinery will be put up in a new addition to the big mill, which addition will be of the same width as the old mill, and some seventy feet in length.

Savage shares have fallen off \$300 since our last quotations, with light transactions. The market closed, however, with decided indications of an early improvement.

Hale & Norcross have slightly declined with light sales. The mine of this company will soon be in a condition for doing a good business, upon which a decided improvement in its shares may be expected. They have now a double shaft 300 feet deep from which they are raising from 30 to 40 tons per day. They will soon be able to raise a much larger quantity. Two mills are now employed crushing the ore from this mine.

Yellow Jacket shares have been much in favor and readily command \$1,050. Holders, however, are firm, and do not care to part with their stock.

Daney shares have met with large sales; 510 having changed hands, at fluctuating prices.

Burning Moscow fluctuated from \$120 to \$135, with a large business, 322 shares having changed hands during the week.

The Mexican Company, since the "cave" has put three new shafts down to the depth of 127 feet at which point they have been compelled to stop on account of water, and will not be able to sink further until they get their engine in operation. They will go down 250 feet before drifting to the ledge. This shaft is one of the best in the Territory, and is divided into three compartments. This Company has but 100 feet of ground, yet they have raised some of the richest ore found in the Territory. The Company has no stock in the market, but its shares are valued at a fabulous price.

The stock of the Mexican Company, No. 2, is beginning to attract some attention. The company has a shaft of 80 feet which has just cut a five feet ledge. The rock looks promising: The shaft makes about 60,000 gallons of water per day, which is kept down with a pump. This stock is quoted at \$35.

The Belvidere Company has recently sold out its original shaft to the Choller Company. Since the sale they have moved east about 100 feet, and sunk another shaft upon unclaimed ground, in which they have struck another vein from which they are now taking out pay rock.

The Sierra Nevada Company is located upon the south side of Cedar Hill. The works of this Company have been



quite recently commenced, with very flattering prospects, and they have done a very large amount of work for the time in which they have been engaged. We shall speak more fully of their work, in our next issue. The stock of this company is in good repute.

Overman shares which last week advanced from \$475 to \$600, have declined to \$475, with a weak market.

Baltic has fluctuated with large transactions.

Esmeralda shares have been rather more active than usual, the last week.

Wide West has met with a further decline, 230 shares having changed hands at from \$71 to \$85.

Real del Monte has further improved and is now quoted at \$425.

Silver Hill has slightly improved, with much enquiry.

In Pond quite large transactions are reported at speculative rates. Opening at \$55, it suddenly advanced to \$100. The losing offers are \$200 bid and \$250 asked, without sales. The bears appear to have it all their own way in this stock.

#### COPPER.

The Atlantic papers, in view of the rapidly increasing shipments, actual and prospective, of copper ore from this to Eastern ports, are beginning to discuss the possibility that the receipts may soon exceed the capacity of the smelting works. A writer in a New York paper, however, sets the matter at rest, by showing, very definitely, that the works at Boston and New York, alone, are quite equal to meet any calls that may be made upon them for some time to come. New York, it is argued, should provide such facilities as should render that point the center of this growing traffic.

Stocks in well developed copper mines are held firmly and will doubtless soon become as desirable for investment as those of a similar class are in New York, Boston or London. In those cities they rank, for reliableness, with bank stocks, and in the latter a copper mine yielding an average of 8 per cent. ore, fully developed would rate at about \$2,000 per foot. Should one be found there coming up to the California standard, of first class mines, of about 20 per cent, its value would be reckoned at an almost fabulous price. Capitalists, in this State, are as yet slow to appreciate the value of a well developed and reliable copper mine. One promising mine of copper, even yet in the infancy of its development, is worth a score of the ordinary gold and silver schemes in the ocean of bubbles now floating on the market.

Napoleon has met with an important advance, opening at \$36 and closing at \$90 with \$95 asked. This improvement is owing to very favorable reports from the mine.

The principle sales of the week have been made at figures of made public. A number of our prominent business men have been the purchasers. At 193 feet the lode is exceedingly rich; width estimated at 25 feet at that depth with 5 to 6 feet of concentrated ore. The works are being enlarged rapidly; shipments rising 200 tons per month. Ore is being used from 165 feet in depth. 35 men are at work night and day.

Several tons of ore from the Aroyo Seco claim, in Amador county, have arrived in this city, the past week—the first shipment from that mine. By the same arrival came twenty-six tons of ore from the Newton mine.

The Pioneer Company's mine, a short distance below Uniontown, El Dorado county, is beginning to attract some attention. This mine, besides giving a high assay of copper, is said to return a very large yield of gold.

A small shipment of ore, the first we believe from the mine, was received in this city from the Washington Ledge at Cloverdale, in Sonora County, a few days since. The ore was taken from a shaft only six feet from the surface, which promises a still farther and plentiful yield of the same.

Our neighbors in Oregon are becoming quite excited about "feet," among which copper feet are taking a prominent position. The latest reported discovery in that region is on the John Day river, and 80 per cent. is claimed for the average of a number of assays. It is said that \$5 cost of transportation per ton, will place the ore within reach of steam communication with this city.

OUR VIRGINIA CITY CORRESPONDENCE.—We have made arrangements with an able correspondent at Virginia City, and shall commence the publication of his letters in our next issue.

REESE RIVER CURRENCY.—Our Reese River friends are much troubled by reason of a great scarcity of small change. To remedy this evil a business firm at Austin purposes to establish a bank for the issue of small "promises to pay." Another firm purposes to stamp small bars of silver and issue them as currency. We think the metallic basis will win.

#### REPORT OF BIDS

At the San Francisco Mining Stock Board,  
For the week ending Sep. 19, 1893.

Names of Companies.	Total No. Shares.	Shares per Cent.	Bar Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
<b>WASHOE STOCKS.</b>									
Ophir	16,800	12	\$300	2000	2000	2100	2025	2010	2100
Gould & Curry	4,800	4	500	4000	4800	5000	5000	5000	5000
Savage	800	1	—	—	2000	2050	2050	2150	—
Chollar	5,600	4	300	800	900	1000	950	950	—
Potosi	2,800	2	500	1000	1000	1000	—	—	—
Hale & Norcross	800	2	500	1000	1000	1000	1000	1000	—
Sierra Nevada	3,000	1	500	70	80	80	84	84	—
Danahy	8,000	4	500	107½	120	105	107½	100	—
Burning Moscow	4,800	2	100	110	118	124	120	115	—
North Potosi	3,000	1	300	37½	36	30	35	34	—
Mercedith	7,200	12	50	—	—	—	—	—	—
Charles Caney	1,800	1	30	23	22	20	22½	20	—
Sacramento	1,800	1	500	—	—	60	—	70	—
Iowa	—	—	—	—	—	—	—	—	—
El Dorado	—	—	—	60	60	60	62½	60	—
Norton	1,600	1	—	—	—	—	3½	4	—
Burnside	—	—	—	—	—	—	—	—	—
Brennus	—	—	—	—	—	—	—	—	—
Pride of the West	—	—	—	52½	50	70	—	—	—
G. H. Quarz M. Co.	—	—	—	—	—	—	—	—	—
Imperial	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel	10,000	1	100	—	—	—	—	—	—
Mount Davidson	10,000	1	200	—	—	—	—	—	—
California	1,200	12	300	—	—	—	—	—	—
Rogers, F. D.	3,600	12	300	—	—	—	—	—	—
Lucerne	2,800	1	250	—	—	—	—	—	—
Lady Bryan	1,800	1	100	—	—	—	—	—	—
La Crosse	5,000	1	500	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Crown Point	—	—	—	—	—	—	—	—	—
Manhattan	—	—	—	—	—	—	—	—	—
Hudson	—	—	—	—	—	—	—	—	—
Lady Ellen	—	—	—	—	—	—	—	—	—
Schiller	—	—	—	—	—	—	—	—	—
Seneca	—	—	—	—	—	—	—	—	—
Vesuvius	—	—	—	—	—	—	—	—	—
<b>ESMERALDA STOCKS.</b>									
Wide West	2,600	1	600	81	80	72	75	74	72
Antelope	1,200	1	500	100	—	—	100	120	—
Esmeralda	1,600	1	1000	—	20	—	20	20	—
Real Del Monte	4,400	1	400	—	350	—	375	560	—
Utah	1,600	1	250	45	46	—	40	—	—
Silver Hill	8,000	1	500	20	—	—	22½	24	—
Nevada	1,200	1	250	—	—	—	—	—	—
Federal Hope	—	—	—	—	—	—	—	—	—
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	—	—	—	—
Falls of Clyde	—	—	—	—	—	—	—	—	—
Sanbeam, S. W. ex.	—	—	—	—	—	—	—	—	—
Banban	800	1	500	—	—	—	—	—	—
Great Western Tun.	—	—	—	—	—	—	—	—	—
Burlington	—	—	—	—	—	—	—	—	—
El Paso	—	—	—	—	—	—	—	—	—
Crockett	—	—	—	—	—	—	—	—	—
Atina	1,200	1	100	—	—	—	—	—	—
<b>COSO STOCKS.</b>									
Josephine	4,800	2	250	10½	—	—	—	—	—
Willow Springs	2,700	1	100	—	—	—	—	—	—
Burnside	—	—	—	—	—	—	—	—	—
Coso	1,600	1	600	4	4	4	5½	14½	13
<b>MEXICAN MINES.</b>									
Mina Prieta	2,200	1	1000	—	—	—	—	—	—
Dios Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	2,700	1	600	45	55	80	82½	90	87½
Josephine	—	—	—	—	—	—	—	—	—
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	—	—	—	—	—	—	—	—	—
Rhodes Diggings	—	—	—	—	—	—	—	—	—
Eureka	—	—	—	—	—	—	—	—	—
Fellowes	—	—	—	—	—	—	—	—	—
Rock River	—	—	—	—	—	—	—	—	—
Utah	—	—	—	—	—	—	—	—	—
<b>HUMBOLDT STOCKS.</b>									
De Soto	—	—	—	—	—	—	—	—	—
Great Basin	—	—	—	—	—	—	—	—	—

#### SALES FOR THE WEEK ENDING SEPT. 19, 1893.

Ophir	156 Shares	\$2100 @ \$2200	per foot.
Falls of Clyde	—	—	—
Great Western Tun.	—	—	—
Josephine	—	—	—
Coso	25	6	—
Gould & Curry	56	5,000 @ 5,1000	—
Savage	17	2,700 @ 2,720	—
Chollar	42	995 @ 1,010	—
Hale & Norcross	4	1,600	—
Uncle Sam	97	130 @ 170	—
Echo	—	—	—
Baltic	243	43½ @ 50	—
El Dorado	10	65	—
North Potosi	65	37½	—
Caledonia Tun. Co.	65	25 @ 37½	—
Independent, G. H.	90	33 @ 50	—
Silver Hill	35	24 @ 30	—
Garibaldi	—	—	—
Bodie Bluff	—	—	—
Willow Springs	50	6	—
Sheba	50	80 @ 95	—
De Soto	5	32½	—
Monte Christo	—	—	—
Birdsall	—	—	—
Bob Black	—	—	—
Techattucup	—	—	—
Napoleon	—	—	—
Fellowes	—	—	—
Potosi	20	1200 @ 1250	—
Yellow Jacket	21	1050 @ 1100	—
Imperial	—	—	—
Overman	20	500 @ 510	—

Best & Belcher	—	—	—	—	—	—	—	—	—
Sierra Nevada	65	80 @ 95	—	—	—	—	—	—	—
Danahy	510	100 @ 125	—	—	—	—	—	—	—
Burning Moscow	322	120 @ 135	—	—	—	—	—	—	—
Charles Caney	55	22½ @ 24	—	—	—	—	—	—	—
Baltimore American	25	42½ @	—	—	—	—	—	—	—
North American	185	70 @ 76	—	—	—	—	—	—	—
Bullion (G. H.)	25	60 @ 65	—	—	—	—	—	—	—
Pride of the West	35	60 @ 65	—	—	—	—	—	—	—
Spanish No 2	12	35	—	—	—	—	—	—	—
Norton	50	4	—	—	—	—	—	—	—
Bu side	5	7	—	—	—	—	—	—	—
Adriatic	—	—	—	—	—	—	—	—	—
Iowa	—	—	—	—	—	—	—	—	—
Madison	—	—	—	—	—	—	—	—	—
Buckeye	228	31 @ 37½	—	—	—	—	—	—	—
Lucerne	—	—	—	—	—	—	—	—	—
Lady Bryan	—	—	—	—	—	—	—	—	—
Mt. Davidson	20	2	—	—	—	—	—	—	—
Cedar Hill Tunnel	—	—	—	—	—	—	—	—	—
North Ophir	—	—	—	—	—	—	—	—	—
Wide West	230	71 @ 85	—	—	—	—	—	—	—
Real Del Monte	56	400 @ 425	—	—	—	—	—	—	—
Utah	—	—	—	—	—	—	—	—	—
Pond	155	90 @ 100	—	—	—	—	—	—	—
Grass Valley	55	65 @ 80	—	—	—	—	—	—	—
Michigan, G. H.	60	30 @ 45	—	—	—	—	—	—	—
Ural	24	90 @ 100	—	—	—	—	—	—	—
Bodie No 2	25	5	—	—	—	—	—	—	—
Blue Ledge	35	9	—	—	—	—	—	—	—
Napoleon, Copper	38	60 @ 90	—	—	—	—	—	—	—
Oncida	75	15 @ 21	—	—	—	—	—	—	—
St. George	70	18 @ 19	—	—	—	—	—	—	—
Pride of Washoe	10	12½	—	—	—	—	—	—	—

#### ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, Sept. 17, 1892.]

	Bid.	Ask.		Bid.	Ask.
Alpine	\$8	10	Lilly Dale	20	35
Amador	5	6	Live Yankee	—	20
Atlantic	5	—	Lord Byron	—	12
Arcade	5	10	La Plata	—	12
Aurora Tunnel	5	6	Lizula Light	—	2
American Freeman Tun.	7	10	Middle Hill Tunnel	—	9
Autopelo	200	250	Main Esmeralda	—	40
Alturas	15	20	Monroe	10	20
Atlas	5	—	McKinstry Tunnel Co.	—	—
Brazili	10	20	Monte Christo, Tunnel co.	—	40
Bodie Bluff Consolidation	9	10	Matual	—	10
Bodie Peak, Bodie District	5	8	Mary Le Gardiner	—	10
Bright Star	15	20	Mina Real	15	18
Bamboo	—	—	Marine Tunnel	—	3
Brewster	10	20	Martinez Tunnel	3	8
Bullion (Van Horn Dist.)	3½	10	Mercedith	—	15
Bodie Bluff, No. 1	3	10	North Willow Springs	—	30
Bodie Bluff, No. 2	16	—	New Esmeralda Consol.	—	2
Banker Hill	5½	10	Newton	—	6
Banparto, Tunnel comp.	—	—	Nevada, (Tunnel)	—	20
Gauchaian	—	—	Ozark	—	6
Climax	11	Old Winnemucca	—	6	—
Crockett	75	Paul Tunnel Co.	—	5	—
Capo	5	Pacific	—	—	—
Chad Alpine	7	Pond	—	65	—
Doris Consol.	—	—	Peru	10	15
Durgen	—	—	Peru (two ft. to the	—	—
Edna	8	Pennsylvania Tunnel Co.	6	—	—
East Essex Ex. Ural	—	—	Real Del Monte	410	450
Excelsior, Excelsior Dist.	—	—	Rebecca	12	—
Empire	20	25	Red, White & Blue	10	—
Franklin, Tunnel company	—	10	Stanford Tunnel Co.	—	15
Franklin	—	—	Stowaway	—	—
Fallstar, Consolidation	—	—	Strawberry	—	—
Fresno	12	Silver Hill	—	60	—
Falls of Clyde	8	Silver Hill, Bodie District.	—	15	—
Great Eastern	—	Seymour	—	—	—
General Hooker (Con.)	5	St. Louis	—	—	—
General Jackson	—	Tuscan	—	—	—
Greenbald	30	Tiger	—	—	—
Golden Harvest	5	Tucker	—	15	—
Golden Cross	10	Tennessee	—	25	—
Governor Seymour	25	Union Tunnel	20	30	—
Golden Age	40	Utah	—	1½	—
Great Britain	5	Ural proper	165	185	—
Golden Era <sup>n</sup> Tunnel Co.	—	Ural (Seymour)	5	10	—
Greenback	20	William Tell	—	—	—
Hanover	10	Wide West	—	—	—
Howard Tunnel Co.	15	Washington, Tunnel comp.	—	—	—
Heath	15	Western Summit	—	75	—
Herman Consol.	15	X-Elizs and Constantinople	—	—	—
Horne Check, Excelsior Dis	8	Yancony consolidated	—	—	—
Jordan	10	Yancony	—	40	—
Keeney	—	Cortez consolidated	—	—	—
Dana	—	—	—	10	15



## COPPER AND COAL AT ANTIOCH.

Mr. Editor:—In response to your suggestion that some difficulty has still to be removed in the combustion of Monte Diablo coal at Antioch, allow me to say that the mode of feeding a furnace with gaseous combustibles mentioned in connection with the Norwegian mode of treating copper sulphurets in my letter of the 3d inst., can be adapted to any sort of fuel; and, in what I consider its most perfect form, can be employed even where the greatest heat is required and with a flame of any chemical character desired in metallurgy; and this with economy in stoking. A form of grate which has been of much service with coal of similar properties to the Monte Diablo, is that termed the "Step Grate"—deep furnace bars are laid, stair fashion, *ie.*, their flat sides upwards, sufficiently overlapping to prevent the cinders from falling through, and sufficiently raised to admit air where the risers would stand in a stair-case.

I have working drawings of some of these furnaces. A POOR CHEMIST.  
San Francisco, Sept. 17, 1863.

NEW MINING OFFICE.—Messrs. W. P. Denckla and A. L. Chamberlin have a newly arranged Office, in the commodious store, No. 418 Montgomery Street, for the purpose of transacting a general mining business. Mr. Denckla was unanimously elected Vice President of the new Board of Brokers recently organized in this city. We have never measured Mr. Denckla's whiskers, neither the girth of his waist, and we do not know his weight (as the *Alta* seems to have determined in the case of the worthy President of the old Board of Brokers) yet we think Mr. Denckla worthy of the confidence of the mining community. Mr. Chamberlin is a man of gentlemanly and pleasing ways.

SEMINARY FOR YOUNG LADIES.—Miss Butler, late of the Chestnut Street Female Seminary, Philadelphia, is about to open a School for Young Ladies, in this City. Miss Butler is said to possess intellectual attainments of a high order. We bespeak for her a liberal patronage.

STATE AGRICULTURAL FAIR.—The State Agricultural Fair at Sacramento, will commence September 25th and end October 2nd. Our thanks are due to I. N. Hoag, the gentlemanly Secretary, for a Complimentary Ticket.

## MINING LAWS AND FORMS

JUST PUBLISHED BY H. H. BANCROFT & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. sep14

R. W. MYERS, & CO.,  
Chases' New Mill, Fremont St., near Market,  
do  
JOB TURNING & SCROLL SAWING.

BRACKETS,  
RED WOOD BALUSTERS,  
NEWEL AND CEDAR BALUSTERS  
for Stairs.

Manufacturers of every description of Oval,  
Circular and Square  
PICTURE & LOOKING GLASS FRAMES  
For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS.

H. C. SOMERS

## GENERAL NOTICES.



DR. H. AUSTIN,  
DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcure (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

## DESKS

AND

Office Furniture,  
OF ALL KINDS..... FOR SALE BY  
JOHN WIGMORE,

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBING, of all Kinds, attended to.

## SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

CHARLES GEDDES,

ARCHITECT,

Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms,  
je 20 San Francisco

FREDERICK MANSELL,

MECHANICAL & ARCHITECTURAL

DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

## New Patent Agency.

WE HAVE CONNECTED WITH THE  
Publication of the "MINING AND SCIENTIFIC PRESS"  
The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

Mining and Scientific Press Agency  
The most desirable place to make application for Letters Patent on the Pacific coast. Apply at  
Office of the "Mining and Scientific Press," Room No. 67, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 27, Government House, EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 67, Government House. Terms moderate. EWER & SMITH.

## PATENT RIGHTS.

Patent Rights Bought and Sold,  
At the office of the "Mining and Scientific Press" Agency  
EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

## Offices To Let,

In the Government House, Corner of Washington and Sansome Streets. Two large suits of Offices, the most commodious and accessible in the city. C. A. CRANE, Proprietor

## GENERAL NOTICES.

HAYNES & LAWTON,

IMPORTERS AND DEALERS IN

CROCKERY,

GLASS WARE,

FRENCH CHINA,

Coal Oil Lamps, Table Cutlery

CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCHANT.]

SAN FRANCISCO.

## WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. 5016-1f ZENAS WHEELER.

Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

## REMOVAL.

OFFICE OF THE PACIFIC METAL  
Surgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers, or Silversmiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

GEO. A. METCALF.

D. S. HUTCHINSON.

METCALF & HUTCHINSON'S

PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below  
Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

## CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

\$3. Per Dozen!

Large sized Photographs \$3—Extra copies \$1 each.  
AMBROTYPE in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.  
Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

## HOTELS.

International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

FIRE-PROOF BRICK BUILDING.

Most convenient to the  
Steamer's Landing, Business sts. & Places of Amusement  
OPEN ALL NIGHT.

City Railroad Cars Pass the Door.  
REDUCTION IN PRICES.

Five Bathing Rooms attached to the Barber Shop  
Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent Spring Bed and Hair Mattresses. The International offers to guests the greatest number and

BEST FURNISHED FAMILY ROOMS;

and sets as good a TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,  
WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL.  
F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

## THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.

H. T. FELTON - - - W. C. MINOR,  
PROPRIETORS.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House Free of Charge.

The House is open all night.

## P. M. S. C. O.

PACIFIC MAIL STEAMSHIP COMPANY'S  
line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

FOR PANAMA.

The following Steamships will be dispatched in the month of September, 1863.

Sept. 13th, - - - Steamer Orizaba.

Sept., 23d, - - - Steamer Golden Age.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,  
And connect, via Panama Railroad, at Aspinwall, with teamships for New York.  
For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidsdorff sts.



FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

REYNOLDS'

Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

127 of these Invaluable Machines,  
ARE NOW IN USE

In California and Nevada Territory, giving a perfectly  
regular motion and  
Saving 20 to 65 per cent of the Fuel.

Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act  
and least liable to get out of order of any Governor in  
use. It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.

Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney  
or Valve in the Blast Pipe by the pressure of the  
steam in the boiler. It will regulate the pressure to a  
pound, on the square inch. It cannot get out of order  
and any person can put one up in an hour after the damper  
is put in.

Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the  
common reamer, and when small holes are wanted, it  
can be done four times as fast. The handle can be worked  
in any direction.

Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.

Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.

Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury  
to the iron. In use for the past EIGHT years.

Refer to—Sugar Refinery, San Francisco,  
Cottell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.

E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

MOYNIHAN & AITKEN,

Boiler Makers and Blacksmiths,

Mission, between Beal & Fremont Sts.,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed  
at the shortest notice, and on the most reasonable  
terms. Jy 29

PUMPS!

HARRISON'S

California Lift and Force Pump,  
WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire Engines, Irrigating,  
etc. This is the Cheapest, Lightest and most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

ALL SIZES;

capable of throwing from ONE HUNDRED to FIVE  
THOUSAND Gallons per Minute—For sale by

G. H. HARRISON,

PHOENIX OIL WORKS,

Je 16 517 Front Street, San Francisco,

50 lbs. MARINE and

Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL  
Works in this city, for Hulls and Decks of Vessels  
on ground. Mineral Rock contains Arsenic, Copper, Li-  
tharge and six other Minerals. When used on the Decks  
Bottoms of Ships, it is equal to a coat of Stone, and  
quite equal to Copper, no worms will ever effect it, and  
cheaper than any other paint.

DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur,  
two parts Mineral Paint, mix with Coal Tar and apply  
hot.

For sale by all Ship Chandlers and Tradesmen, in boxes  
50 lbs. each, or by the Pacific Metallurgical Works.

25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal  
covering them with a coat of Stone, being perfectly  
re-Proof, and costing less than any paint.

DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part  
white lead, thin with Linseed oil: if a lighter color is  
desired, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white  
lead; mix with Linseed oil. Put it thick on a tin Roof  
one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FORQUE, Superintendent.

WORKS, North Beach; Office, 509 Sac-  
ramento st., San Francisco.

PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,

No. 10, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

To Quartz Miners.

Knox's Improved  
AMALGAMATING PAN,  
WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST  
complete amalgamation of the precious metals of  
any process now known.

By it steam is introduced in the most effective and econ-  
omical manner, while it is peculiarly adapted to the  
catching of floating gold and silver, known to be other  
wise lost. Made exclusively by

PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 10 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

JOHN P. GALLAGHER.....JOSEPH H. WEED.

GALLAGHER & WEED,

BRASS & BELL FOUNDRY

AND

LOCK FACTORY.

No. 125 First Street, opposite Minna, next door to Pacific  
Foundry, all kinds of

Brass and Composition Castings and  
Finishing, done with neatness and  
dispatch.

CHURCH AND STEAMBOAT BELLS, OF ALL SIZES  
Made to order. Engineers Gongs made and hung in  
the best manner. Bank, Vault, Store and Prison  
Locks, also brass Padlocks and Ship Locks of various  
patterns, on hand and made to order.

Particular attention given to casting Rubber  
Drums and Ship Work in general.

All Jobs promptly attended to.—Prices  
moderate.  
Removed from Oregon street, between Front and Davis.

Miners' Foundry

—AND—

MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHIN-  
ery, the Best and Most Economical, manufactured  
in the state of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:  
Steam Engines and Boilers, Flour, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgamators  
and Water Wheels—some in operation and on exhibi-  
tion.

\* Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.

All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING  
San Francisco, February 23, 1863.

San Francisco Machine

....AND....

IRON WORKS!

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON  
most reasonable terms.

Steam Engines, High and Low Pressure; Quartz  
mills, Saw mills, Mining Pumps, Hoisting machines for  
mining purposes, Wine Presses, Agricultural implements  
etc, etc, and Castings of all descriptions made to order  
Steam Engines exchanged and for sale by

DEVOTE, DINSMORE & CO.

REPAIRING promptly attended to.

FOR SALE.

San Francisco, July, 1863.

Jy 13

VULCAN IRON WORKS COMPANY

P. Torquet, Manager,

STEAM ENGINE BUILDERS

and

BOILER MAKERS,

Iron Founders and General Engineers,

No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing  
Machinery.

Shoes and Dies of the hardest iron,  
Russia Iron Punched Screens.

Steamboat Machinery; Saw, Flour and Sugar Mills.

High and Low Pressure Boilers of all Styles.

JONVAL and other Turbine Water Wheels with latest  
improvements.

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE  
and Lift Pumps, Church and Steamboat Bells, Taver-  
ner and Hand Bells and Gongs, Hose and all other joints,  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PUMPS and NOZZLES for MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.;  
COUPLING JOINTS of all sizes. Manufacturers of "Gar-  
ratt's Patent Improved Journal Metal."

D. MORRIS,  
MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of  
Repairing done at moderate prices. Jc 13

LEWIS COFFEY AND RISDON,  
STEAM BOILER AND SHEET IRON  
WORKS.

The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.

Old Stand, corner Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

THEODOR KALLENBERG

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophi-  
cal Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to.  
No. 418 Market street, San Francisco.  
n7.3m) San Francisco.

HIRAM WRIGHT,

PICK MAKER,

Has established a Manufactory for the Making of  
MINER'S PICKS,

at

NO 121 BUSH STREET, SAN FRANCISCO,

[Between Sansome and Battery.]

When one has had a superior Pick for Miners use  
As he manufactures all his picks under his own personal  
supervision, he warrants them as being made of the  
best material and by the best workmanship.

Orders attended to and filled promptly and with dis-  
patch. aug 17

WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established him-  
self in San Francisco, for the manufacture of every  
description of PICKS, of the best material, at reduced  
prices. Pick Eyes of the best iron furnished in any quan-  
tity, at low rates. Orders from the country promptly  
attended to. N. B.—None genuine unless stamped with  
my name.  
JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.

CALIFORNIA TOOL WORKS!

John Weichhart,

Manufacturer of

All Kinds of Edge Tools, Etc.,

Plane Irons Moulding Irons,

No. 22 Fremont street, bet Market and Mission  
San Francisco, July 14, 1863. Jy 20

GOOD DIVIDEND.—The Jefferson Quartz  
Mining Company, at Brown's Valley, twelve  
miles above Marysville, on the Yuba River,  
(lately known as Snyder & Frazier,) declared  
a dividend on Monday of \$1,000 per share to  
five shares, for the previous fortnight's run of  
their mill. That is fully equal to Gould &  
Curry.

This mill recently took out, the result of  
eight day's crushing, 218 65.100 ounces of  
gold, worth about \$5,414. In the same time  
they exhausted about one hundred tons of pay-  
rock which is now ready to crush.

COVERING ARMOR PLATES WITH GLASS.—

The whole of the armor plates of the British  
cupola ship *Royal Sovereign* are to be covered  
with a vitreous sheathing, which consist of a  
surface of glass based upon small plates of  
iron, sufficiently thin to be to a certain extent  
flexible, which are applied to the ship by a  
new adhesive process, and have been ascer-  
tained to be capable of resisting all ordinary  
contingencies from pressure or abrasion. The  
cost is 1s. 7d. per square foot.

STOCKINGS "to suit the feet" are now sold  
in London. They are, like shoes, "rights  
and lefts." The inner edge of each is quite  
straight to the extremity of the great toe,  
while the outer is rounded off to the shape of  
the foot.

Eye, Ear and Throat.

DR. DE CASTRO,

Oculist and Aurist,

WHO HAS PRACTICED IN NEW  
York and all the principal cities of Europe with  
such unrivalled success, and from each place is in pos-  
session of the most eminent testimonials, may now be con-  
sulted upon diseases of these delicate organs, with a view  
to their permanent cure. Deafness of long standing tho-  
roughly cured. The Doctor employs his (by the Medical  
Society of London approved)

Self-adjusting Artificial Tympanum,

For the relief of deafness, attended by loss or injury of  
the membrana tympani, and for the cure of discharge  
from the ear—the invention of Dr. Castro, M. D., author  
of "Deafness Practically Illustrated as to its Nature and  
Treatment," etc.

The self-adjusting Artificial Tympanum was first intro-  
duced to the notice of the profession at the meeting of the  
Medical Society of London, on the 20th of November,  
1863. An animated discussion ensued on the reading of  
the paper, and several members of the Society bore testi-  
mony to the success of the remedy and the importance of  
the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-  
Adjusting Artificial Tympanum, as he had observed the  
immense benefit a young lady friend of his had received  
from it. She was in fact, quite deaf, and in a most mis-  
erable state; the effect of the tympanum was instantaneous—  
quite like a miracle. Five more testimonials from  
Members of the Medical College, New York, and the prin-  
cipal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and  
Kearny streets. Entrance on Market street.

Mr. Editor.—Having been afflicted  
with deafness for the last two years, originating from a  
severe cold, and for the last month suffering from the  
most excruciating pains in my ear, I was obliged to come  
down to San Francisco to seek relief. After a physician's  
recommendation to wait on Dr. De Castro, on the corner of  
Kearny and Market streets, and underwent one operation,  
and it is with the utmost pleasure I can say my hearing  
was suddenly and without pain entirely restored. I deem  
it my duty to make this known to the public, and to recom-  
mend Dr. De Castro's skill as an aurist.

JOHN REESE, Napa Valley.

James Callaghan, witness.

San Francisco, July 30th, 1863.

[From the Daily Alta.]

San Francisco, June 30th., 1863.

DR. DE CASTRO'S ALTA:  
Permit me through your widely circulated journal, to  
say, that my daughter Mary Ellen, has been afflicted with  
deafness since she was thirteen months old, and that she  
has been a member of the Deaf and Dumb Institute since  
it was organized. On taking her to Dr. De Castro, on the  
corner of Kearny and Market Streets, and undergoing un-  
der his direction, two operations, she has heard sounds  
very distinctly; and is now, I am happy to state in a fair  
way to get permanent relief. The result, thus far, is sat-  
isfactory; and I deem this notice due to Dr. De Castro for  
his skill; and would recommend all parties similarly af-  
flicted to give him a trial. My daughter has at different  
times been under the care of the most skilful physicians  
and aurists in California, but up to the period of visiting  
Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT,

812 Green Street.

APARTMENTS.

FURNISHED APARTMENTS, WITH, OR WITHOUT  
Board, at 1018 Powell Street, between Clay  
and Washington street. Persons desirous of a respectable  
home will do well to apply Jy 6



## MINING NOTICES.

**Wide West Copper Mining Company, Office,** 528 Montgomery street, San Francisco, September 10, 1863.—Notice is hereby given that an assessment of Twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, and payable immediately, in U. S. Gold Coin, to the Secretary, at the office of the Company, or to J. M. Pike, Superintendent, at Copperopolis.

By order of the Board of Trustees,  
sep14 M. G. ELMORE, Secretary.

**Bald Eagle Gold Mining Company,** Gold Flat District, Nevada County, Cal.—Notice is hereby given that a assessment of Twenty five cents per share has this day, (September 9th 1863.) been levied by the Board of Trustees on the Assessable Stock of the above named company, and payable immediately in United States Gold Coin to the Secretary at his office, or to T. S. Smith, Superintendent, Grass Valley, Nevada Co.

By order of the Trustees,  
P. L. BIBBINS, Secretary, 105 Montgomery Street.  
sep13m

**Winona Gold and Silver Mining Company**—The first annual meeting of the stockholders of the Winona Gold and Silver Mining Company, will be held at the Company's office, No. 426 Montgomery street, for the election of five Trustees for the ensuing year, on the 19th day of September, 1863, at 7 1/2 p. m. By order of the Board of Trustees, M. G. ELMORE, Sec'y.  
aug24

**Red Jacket Mining Company.**—At a meeting of the Board of Trustees of the above company held July 7, 1863, the first assessment of Five Cents per share on the capital stock was levied, payable immediately in United States gold coin, to the Secretary, office 420 Montgomery street, Room No. 2. By order of the Board.  
aug24 J. W. CROSLY, Secretary.

**Office Table Mountain Copper Mining Company.**—Notice is hereby given that the Board of Trustees of this Company, held July 25, 1863, an assessment of Thirty Cents per share was levied upon the capital stock of said Company, payable immediately in United States gold coin to the Secretary, at the office of the Company, No. 528 Montgomery street, or to J. M. Pike, Superintendent, at Copperopolis. M. G. ELMORE, Secretary.  
aug24

**Office of the Niagara Consolidated Gold and Silver Mining Company,** El Dorado Canon.—Notice is hereby given that the Board of Trustees have this day levied an assessment of Twenty-five Cents per share upon each and every share of the capital stock of the said Company, payable in U. S. gold coin immediately to the Secretary, at the office of the Company, No. 528 Montgomery street, or to the Contractor at the Canon.

M. G. ELMORE, Secretary.  
San Francisco, July 20, 1863.  
aug24

**AGENTS WANTED.**  
We want a good Agent in every city, town and settlement, on this Coast. Applicants will send their names with reference, when specimen numbers of the **Mining & Scientific Press** will be forwarded to them, and their names added to our published "List of Agents."  
EWER & SMITH.

**Utica Gold & Silver Mining Company,** Office, 528 Montgomery Street, San Francisco, Sept. 18, 1863.

Notice is hereby given, that in accordance with the laws of the State of California, and the resolution adopted by the Board of Trustees of the Utica Gold and Silver Mining Company, Esmeralda District, there will be sold at Public Auction, at the Office of the Company of Friday October 23, 1863, at 10 o'clock A. M., so many delinquent Shares of the Capital Stock of the Utica Gold & Silver Mining Company, standing in the names of the following named persons, as will be necessary for the payment of the assessment of ten cents per share, levied June 12, 1863, and two dollars per share levied August 10, 1863, together with cost of advertisements and expense of sale, unless said assessments with accruing charges are previously paid:

Names.	Certificates.	Shares.	Amount.
L. B. Lott, No.	7,	20,	42.00.
G. L. Church, "	11,	20,	42.00.
G. H. Gray, "	19, 25,	40,	84.00.
J. F. Gilbert, "	27, 31, 34,	180,	360.00.
	29, 32, 35,		
	30, 33, 36,		
	37, 40, 43,		
F. A. Baker, "	38, 41, 44,	180,	378.00.
	39, 42, 45,		
G. L. Church, "	47, 53, 54, 55, 56,	35,	72.00.
Geo. Morrow, "	62, 63,	15,	30.00.
J. Meyer, "	68,	5,	10.00.
J. Kausler, "	69,	5,	10.00.
	G. L. WALRATH, Secretary.	1m	

San Francisco, Sept. 18, 1863.

## TO QUARTZ MINERS.

All persons interested in Mining Machinery are invited to call at Donahue's Foundry and examine my improved Amalgamator. It is unquestionably superior to anything now known for amalgamating Silver and Gold. It works 1000 pounds at a time, and will amalgamate over three tons a day. By the motion of the revolving muller, the pulp is drawn through its centre and passes under it, between the grinding surfaces, to the circumference; from whence it passes again over the muller to the centre, through the holes and between the grinding surface to the circumference as before. Thus a constant circulation of the pulp is kept up, bringing the particles of ore again and again under the muller, and reducing the whole mass to an impalpable powder.

No quicksilver lies between the surfaces to be ground, but at the circumference and centre of the pan where the metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in December last, and all persons are again warned against purchasing machines made at the Miners' Foundry called "Wheeler's Amalgamator," as they are an infringement on my patent, and a suit is now pending in the U. S. Circuit Court against the parties infringing. My Amalgamators can be seen running at Donahue's Foundry, where all can judge of their operation and the very superior style in which they are being manufactured.

sep21 THOMAS VARNEY.

## MINING CARDS.

**ALEXANDER STOTT,**  
MINING SECRETARY,  
512 Sansome Street, San Francisco.

Secretary of—  
Horse Shoe, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

**T. C. Sanborn & Co.,**  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**  
GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

J. F. MILLER. W. C. COLEY.

**MILLER & COLEY,**  
Stock Brokers & Mining Agents  
327 MONTGOMERY STREET,  
Between California and Pine, in Jerome Rice & Co's Real Estate Sales Rooms, San Francisco.

**ALL KINDS OF STOCK AND MINING**  
Business attended to with Promptness  
and Dispatch  
aug17

**L. F. LELAND,**  
STOCK BROKER,  
No. 631 Clay street,

Office Hours, 10 to 11, A. M.; 2 1/2 to 3 1/2, P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY  
**PEASE, BOWLEY & CO.,**  
Real Estate, Stock and Exchange  
BROKERS,  
621 Montgomery street, San Francisco.

**LEGAL TENDER NOTES AND MINING STOCKS,**  
BOUGHT & SOLD.  
je-29

**AGENCY**  
For the Purchase and Sale of  
**MEXICAN MINING STOCKS**  
At No. 411 Clay Street, San Francisco.

**OFFICE OF THE PENA AND LA MARRONENA SILVER**  
Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.  
je13 Wm. FAULKNER.

**New Bedford Copper Company.**  
THE UNDERSIGNED HAVING BEEN APPOINTED  
Agents for the above Company, are receiving regular supplies of their superior manufactures of

**SHEATHING COPPER;**  
**BRAZIER'S COPPER;**  
**COPPER BOLTS;**  
**YELLOW SHEATHING METAL;**  
**COPPER AND COMPOSITION NAILS;**  
Which they offer to the Trade at the lowest market rate, and on the most favorable terms.  
je-29 MORGAN, STONE & Co.  
108 Front Street, San Francisco.

R. W. FISHBOURNE,

**PRACTICAL LITHOGRAPHER,**  
ENGRAVER AND PRINTER,

No. 529 CLAY ST., CORNER OF LEIDESDORFF,  
San Francisco. State and County Bonds, Stock Certificates, Bills of Exchange, Bills of Lading, Bank Checks, Landscapes, Architectural and Marine Views Show Cards, Labels, Etc., executed with neatness and dispatch. N. B. All orders in Crayon Work promptly attended to.

## MINING.

N. B. Mining Stock Certificates executed with promptness and dispatch, and at greatly reduced rates. jy6

**MYERS & DAGGETT'S**

**Mining and Stock Exchange,**  
No. 23 1/2 B Street, Virginia City, N. T.

**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* \* Abstracts of Titles Furnished, Etc.

## BUSINESS CARDS.

**Napoleon Copper Mining Company.**  
Capital Stock.....\$1,620,000.  
2,700 Shares---\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACCRELLISH  
Secretary.....R. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....A. W. HASKELL

## TRUSTEES.

F. MACCRELLISH, of Alta California  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je29

**THE EUROPEAN**  
ORE REFINING  
COMPANY.

Quartz Mill and Furnaces, Bryant Street,  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF

**ORES AND MINERALS.**

In large or small quantities, for such Experienced Treatment by the

**LATEST EUROPEAN METHODS,**

As may be ascertained by

**CAREFUL ANALYSIS,**

At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.

At The South Park, and Folsom and Kearny street Cars pass Bryant street.  
au31

**The Pacific Mineral Company**

**MAKE LIBERAL ADVANCES UPON THE ORES OF**  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.  
Discount taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-1f Montgomery Street, San Francisco.

**MARTIN & Co.,**

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

**Purchase of Copper Ores;**

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York. San Francisco.

San Francisco Post Office, Box 1259.  
je 1.

**San Antonio Gold and Silver Mines,**  
LOWER CALIFORNIA,

**FORWARDING & MINING AGENCY.**

**SAMUEL SMITH,**

OFFICE—North West Corner of Front and Clay  
Streets, San Francisco.

**MINING MACHINERY AND MERCHANDISE FOR-**  
warded, Mining Claims secured, through the  
resident Agent at San Antonio, and information fur-  
nished regarding any claim, in that Territory, on Com-  
mission.  
je-26

**H. C. KIBBE,**  
MINING SECRETARY,  
Commissioner for Nevada Territory,  
542 Sacramento st., cor. Montgomery  
(ARMORY HALL.)

## BUSINESS CARDS.

**SOUTH PARK**  
Quartz Mill and Reduction Works

GOLD AND SILVER ORES WORKED AT REASON-  
able rates, and Working Assays made of small  
lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO.,  
Office in Shiel's Block, opposite Masonic Temple,  
je13 S. F. CLOUSER, Secretary.

**W. W. HANSCOM,**  
Steam and Mechanical Engineer,

Designs furnished, and Drawings made for  
Engines, Mills, Water Wheels, Mining Ma-  
chinery, etc., etc.,  
At Golden State Iron Works,  
aug x First Street, San Francisco.

**TO MINING COMPANIES!**  
Offices To Let  
SUITES OR SINGLE ROOMS,  
in Government Block,  
N. W. Cor. of Sansome and Washington sts.  
au-24

El Paso District, Los Angeles County,  
**MINING AGENCY**  
C. W. TAPPAN, GENERAL AGENT

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mine  
for a reasonable consideration.

LETTERS OF ENQUIRY, containing Revenue or Postage  
Stamps to the value of fifty cents, and enclosing an ad-  
dressed envelope for reply, will be promptly attended to.  
The subscriber has a carefully prepared map of all the  
lodes in the district, a portion of many of which are for  
sale at very low figures.

For further particulars he would refer to J. Bur-  
net, Esq., 425 Davis St., San Francisco Cal.  
El Paso, June 21, 1863. C. W. TAPPAN.  
au31

**MINING & SCIENTIFIC PRESS.**

**THE ONLY MINING, MECHANICAL AND**  
SCIENTIFIC PAPER ON THE  
CONTINENT.

**THIRD YEAR! VOLUME VI.—NEW SERIES**

A new volume of this extensively circulated paper  
commenced Sept. 11, 1862. It is intended that over  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits  
together with several original engravings, of new inven-  
tions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietor to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published.

**The Mining Interest!**

Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of Mi-  
ning Stocks, new inventions of Machinery adapted to the  
purpose, and of everything generally that may be of ser-  
vice to the Miner.

**The Inventor!**

Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having long  
great experience as Patent Agents, together with facili-  
ties at Washington that enable them to obtain Patent  
with dispatch.

**The Mechanic and Manufacturer!**

Will be greatly benefitted by its perusal, as its co-  
lums will from time to time contain original engra-  
vings of new machines and inventions, together with  
large amount of reading matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest  
our readers.

**To Chemists, Architects and Millwrights**  
This journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of in-  
formation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plan-  
ters will not be neglected, engravings will be given  
agricultural implements, and the farming interest ge-  
nerally will be amply discussed.

## Terms.

To mail subscribers:—Four Dollars per annum;

**Club Rates.**

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Names can be sent in at different times and for  
different Post-offices. Specimen copies will be set  
gratis to any part of the country.

**EWER & SMITH, Publishers,**  
Room 57, Government House, Corner of Washing-  
ton and Sansome streets, San Francisco.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, SEPTEMBER 28, 1863. NO. 48.

## REMOVAL.

The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing more room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.

## A Mammoth Project for supplying Virginia City with Pure Water.

The problem of how best and soonest to supply Virginia city with pure water, is exciting much interest there at this time. The *Enterprise* gives a lengthy report upon the subject from Engineer Ostrom made to the company, which has undertaken the enterprise, from which we gather the following facts:

It is proposed to collect the water from several small mountain streams to the northward and westward of Washoe Lake and bring the water so collected into Virginia. To do this, it is necessary to convey the same across a valley a distance of six miles, the lowest depression of which is 1200 feet below the required level at which the valley must be crossed to reach Virginia City. To do this one of two methods must be adopted—either to pump this water up to an elevation of 1,200 feet by machinery, or to carry it across the depression in iron pipes. Ordinary cast iron pipes will not stand the pressure; hence boiler iron must be used. The pressure at the great depression will be 651 lbs to the square inch, which is equivalent to a pressure in a 42-inch boiler of 235 lbs. The pipe at this point will have to be half an inch thick. But as this pressure will only extend for a quarter of a mile, it is estimated, that an average of one quarter of an inch throughout the entire distance will be ample. This will make the amount of weight of iron to be used—32,000 feet of 15-inch pipe, half an inch thick—within a fraction of 630 tons; which at 15 cents per lb will give \$191,700 as its cost. The entire cost of the work together with service pipe laid through the city is estimated at \$497,000. The supply furnished will be 3,000,000 gallons per each 24 hours.

**THE ACID WORKS.**—The Carson *Independent* announces the starting of the Acid Works in that locality as follows:

The acid works are completed, and have commenced work. Everything works to the satisfaction of the proprietors, and in a few days they will be able to supply the Territory with sulphuric acid at much less cost than the imported article. Our mill men should encourage all enterprises of the kind, as they go to make up the wealth of the Territory.

It is the intention of the proprietors if they meet with proper encouragement, to enlarge the works so as to manufacture all the chemicals now used in the process of reducing the precious metals.

## THE GROSCH COMPANY.

This mammoth incubus will not go down at the bidding, but still threatens to prove a formidable cloud on the title of some of the leading mines on the Comstock lode. It would seem as though the lawyers of California were the busiest, and most subtle of all created humans. It is almost if not an utter impossibility to so perfect a title or enact a law that a California lawyer will not rend in shreds by the force of his logic or the skill of his cunning. It may be that they are one of the necessary evils of the land, and that we cannot do without them. If we could have it our own way, however, we would try it for a while, anyhow, and if the experiment proved a failure would endeavor to put up with the infliction with the best grace possible. It is our honest opinion, that a commission might be devised, for every mining district, where nine-tenths of all mining disputes might be fairly and equitably settled without the intervention of any other lawyer than the commissioner upon the Bench, who, of course should be a man of probity and standing, especially selected for his wisdom and prudence, and appointed—not elected—to hold office during good behavior.

But we have almost lost sight of the item on which we started, the Grosch Company, which has just issued a pamphlet of twenty pages, setting forth the ground of their claim to three-fourths of 3,750 feet on the Comstock ledge. This claim will afford most excellent pickings for the *coterie* of lawyers who, no doubt were the getters up of the scheme for the simple purpose of levying black mail upon some of our wealthy companies. The companies, however, seem to regard it, apparently with very little concern, and declare themselves in possession of evidence that cannot fail to overthrow it entirely. The claim covers the following subdivisions of the Comstock ledge:

Gould & Curry	1200 feet.
Best & Belcher	225 "
Dick Sides	500 "
White & Murphy	210 "
Kenney	60 "
Central No. 2	150 "
California	300 "
Central No. 1	150 "
South Ophir	200 "
Mexican	100 "
North Ophir	655 "

Together with the net profits arising therefrom since the occupation by others.

**FORREST HOME.**—Considerable interest is being taken in copper mines at and near Forrest Home, Amador county. The "Exchange Company" has recently been incorporated, and are now prosecuting the work upon their vein with energy. At a depth of thirty feet the vein presents most excellent indications, showing a five foot lode interstratified with three distinct veins of sulphur ts, which present unmistakable indications of soon concentrating in a heavy lode. The secretary of this company, Mr. N. King, has left a fine specimen of ore at this office, taken from the mine, and weighing some 50 pounds. They have a large quantity of ore already on the surface, and are about preparing the same for shipment. We hope soon to report this among the ore-shipping mines of that district. The Exchange is located about two and a half miles southerly from the Oriental and Cosumnes mines.

## SPECIMENS FROM EL PASO.

We neglected in our last issue, to acknowledge the reception of a box of specimens from El Paso, the new mining district on the road from Los Angeles to Slate Range, the locality from whence the letters, recently published over the signature of "C. W. T." were written. This is evidently destined, at an early day to become an important mining locality. The specimens which we have received, all present similar characteristics, and are quite unlike any which occur at any point to the Northward. The chief value of these ores, we presume, consists in silver. Gold, we believe, occurs to some extent, and nearly every specimen in the collection before us presents strong indications of copper. Among the companies represented, we notice the Eureka, Garibaldi, Comet, Tucker, Gov. Downey, Laurel, Gau, Milliken, McClellan, Morning Star, Ben. Lohmond, Manzanillo, Narboe No. 2, Newport, Molino del Rey, Boston, Orizaba, and Maine.

Persons interested or curious in the mines of this region are invited to call and examine these specimens.

**A SIMPLE MACHINE FOR MAKING ICE.**—All Paris has recently been rejoicing greatly over a recent discovery for manufacturing ice in a cheap and simple manner, so cheap and simple as to place the entire process within the means of every housekeeper. The machine is described as follows:

"A cylinder of metal—tin will answer—with a movable cover at one end, to be kept tightly in its place by a screw when shut; with two openings one at each end, to receive through two funnels the materials used; and a discharge cock at one end, to discharge the contents when the cylinder is to be emptied, is all the apparatus required. This cylinder, when properly charged, is placed on a pair of rockers, so that a see-saw motion may be obtained. To convert five hundred French grammes of water into ice (each gramme being nearly seventeen grains avoirdupois) it is necessary only to place in this cylinder or well twelve hundred grammes of sulphate of soda and eight hundred grammes of hydrochloride or muriatic acid. Into this preparation or bath, says the inventor, place a form or vessel containing the water to be frozen, a bottle of champagne to be frapped, or any other material required to be frozen. Close the cover, screw it fast, and then for seven or eight minutes give the cylinder or well a see-saw motion on its cradle, and you obtain the desired result. A solid block of ice of five hundred grammes may be produced by this operation."

"All Paris, has been running to see the machine at the Rue de l'Arbe, Sec. No. 60, where its effects are publicly exhibited. These machines are rapidly sold at from fifty francs to one hundred and twenty, according to the size. A late number of the pictorial paper *L'Illustration* gives a drawing and a description sufficiently intelligible to enable any of our metal workers to manufacture them. If we may believe the half of what is said, our dependence for cold drinks will no longer be upon the icemen, but on the chemists."

**WASHOE TO BE REPRESENTED AT THE WORLD'S FAIR.**—Almarin B. Paul, Esq., is collecting a valuable set of specimens, to represent the mineral wealth of Nevada Territory, in the approaching World's Fair at Paris. Mr. Paul has probably contributed more than any other individual toward the development of that region. He was one of the earliest pioneers in Washoe and has devoted his entire energies, both pecuniarily and mentally, towards its development. He is deserving of much credit for his efforts in that direction.



THE HUMBOLDT MINES.

For some reason or other the Humboldt mines appear to be in a measure lost sight of by newspaper correspondents, of late. The Humboldt Register, however, assures us that the mines have neither "dried up" nor are they deserted. But little prospecting, according to that paper, seems to be going on at the present time, but all the old companies are "plodding quietly along, getting in their assessments as quietly as possible, and putting in good solid blows and blasts. This," adds the Register, "is all right. It will bring the country out in proper light ultimately, though all looks tedious at present."

The Register further says:

We did hope, that capitalists who put in so liberally for feet would do something in the way of providing means of separating our metals, and thus show the world what these mountains of ore are worth. It would have helped the miners, and would have been a much shorter road for capitalists, to the immense fortunes destined to be worked out of the silver lodes. It would be the shorter road now. Enough is shown to attest beyond cavil the unprecedented richness of the Humboldt mines. But the air line has taken elsewhere the capital that should be this have built mills for us. Wind work has told for other localities, and we must work patiently on with the few mills we have—trusting to quiet industry to establish for us what speculative gas claims all for other sections."

The Register gives full reports of the progress of operations in the several districts, from which it would appear that the miners themselves are not at all discouraged at the present cloud which hangs over that region. We condense:—

STAR DISTRICT.—No accounts save that all the companies of that district are pushing ahead with their work.

BUENA VISTA DISTRICT.—Companies all at work. Cincinnati, the largest tunnel in that region in 300 feet. Sargent pushing on their tunnel night and day. Buckeye, ditto; in 110 feet. Anderson in 70 feet, with a well defined and good looking ledge. National & Downey, Cedar Hill, going ahead.

The "Monitowoc," have pushed their tunnel to the distance of 100 feet. This is one of the most promising ledges in the district. We have assays of rock from this ledge before us, as we write, made in this city, which read as follows:

Average assay of 14 sacks of Monitowoc, \$525 35 to the ton of 2,000 lbs.

Another informs us that 3,300 lbs. of rock from this mine worked by Bradshaw & Co. of this city yielded at the rate of \$525 to the ton.

Another assay yielded \$1,417 89 in silver; and still another \$328 52 in silver and \$33 11 in gold.

Assays in Unionville have been made as high as \$3,000.

With such indications we should suppose the company might go on with the greatest confidence in developing their mine.

SACRAMENTO DISTRICT.—A correspondent of the Register pronounces this one of the richest districts in the region.

The Cosumnes are driving in a very extensive tunnel, working night and day. The Howard, Iowa, Mary Stephens, Tehama, Sebastopol and many other promising claims are included in this district. The correspondent alluded to says:

"The best indications of silver ledges (the black and brown traces) are more fully shown here than in any other district yet discovered. It is remarkable that so few miners or prospectors are neither geologists or mineralogists, but merely visionists; they seem to run astray after the green and blue sulphurets or stains for rich mineral indications—a most fatal error."

SIERRA DISTRICT.—The Sierra District is also thriving. The Croesus is hauling some very rich rock to the Sheba mill. The result will soon be known. The Natches is still pushing on their tunnel. Empire Tunnel Company is taking out rock and having it worked at Fall's mill. The Eclipse Tunnel is being pushed on vigorously under Charley Barber's supervision. The Neptune Series, Gideon Band Series, Monroe Series and numerous other Companies are actively pushing forward the work of development.

TRINITY DISTRICT.—This is comparatively a new district—inhabitable, sandy, salty, saggy, full of alkali and good in nothing unless it be mines; in this particular the Trinity folks think they have "got it." The Evening Star Company are taking out rock, and sacking it to send to Virginia City to be worked—considered rich in both gold and silver. The St. Charles Co., Keystone, Texas, Pennsylvania, etc., are all promising ledges, and located in this district.

ESMERALDA.

Probably no mining camp east or west of the Sierra Nevada has suffered more, proportionally, from law suits and the general dilatory proceedings of the Courts, than Aurora city. The calendar of her District Court has been for some time overflowing with complicated and confused litigation, the result, according to the Times, of judicial inertia. The recent boundary survey having proved that the mines, or at least four-fifths of them are outside of the limits of the State of California and her courts, has apparently dissolved numerous injunction suites, and, by a sort of tacit common consent, the several companies have again resumed work upon their claims. The Pond company have put four shifts of hands to work, Real del Monte and other companies have also gone to work again, and the camp is assuming quite an unwonted degree of activity. The wages paid to the laborer will enable him to pay his obligations and the boarding man or merchant will receive his demands in gold, which shows the beneficial effect, active employed labor has upon the whole community, and no branch of trade or business can fail to be effected beneficially thereby.

The Times is very properly jubilant over the new condition of things and asserts that the ledges of that district only need to be worked to realize the most sanguine expectations. It claims that the Del Monte company, to-day, works as rich a ledge and as lasting as ever poured bullion into the lap of enterprise from any quarter—Virginia, Gold Hill, or any place else. It furthermore says:—

"We have an abundance of rock which pays all the way from fifty to two hundred dollars per ton and upwards; and will they tell us that our mines are of no value? If stocks are down, what of it? Some capitalists have faith sufficient to erect mills of great value among us, and they believe they will be remunerated. Mr. Fogus has just completed his mill. The Real del Monte will before long, have their mill done. The Antelope Company is putting up a large mill. To those who would condemn us, we would say, suspend your judgement for a while—let our new mills get under way. Let them add their yield to that of those now running, and after a fair test, if our mines will not pay, give your verdict against them. Till then you should not say ought against us."

THE MINES.

The Times notices four good sized "bricks," valued at \$18,363, the yield of 164 tons of rock from the Aurora ledge, of the Real del Monte Consolidation—\$112 to the ton, crushed, we presume, at Fogus' mill. That comes up to Comstock, and with sundry yields from other ledges, which we give below, affords pretty good evidence that Esmeralda is very far from being a failure.

The Real del Monte mill, one of the finest and most complete on the Western Slope, will commence running about the middle of November, after which time the Company will be able to crush their own rock. They now have a contract for the delivery of 10,000 tons of rock at their mill at the rate of 40 tons per day. It is estimated that the rock last crushed is a fair average of what is to come. A pretty good prospect for one Company. We look for a rapid increase of Bullion Shipments from this Camp from this time out.

Mr. Fogus has completed his mill; it went into operation on the 9th inst. The mill has 12 stamps, 8 Wheeler pans, and 3 separators. The machinery is well arranged. Mr. F. is to crush for the Real del Monte Consolidation.

The Crockett has now fairly tested their ledge and have proved by practical demonstration that it is valuable. They recently cleaned up \$8,000 as the result of one week's run. After paying all expenses, they were enabled to declare a dividend of \$5 to the foot. They have a shaft down 180 ft., and are working night and day.

The Seymour Company recently cleaned up \$1,400 from 10 tons of rock. This Company has also been enabled to declare a dividend. Their shaft is down to the depth of 60 feet. The claim is pronounced valuable.

The Clan Alpine is being worked with two sets of hands. The Company intend to take out at least fifty tons of rock for their next crushing. The rock is thought by the Company to be improving. The deeper they sink the richer it is. That is a fine characteristic.

The Maggy Green Company is situated on Silver Hill, near the Utah. It is reported the Company recently struck very rich rock. The ore resembles the Utah, and is said to be equally as rich.

The Clan Alpine has recently had a crushing with the most satisfactory results. We expect to hear of another crushing soon. Their ledge improves as they go down.

The Pocasset are about having some of their rock crushed. They take it to the mill in sacks. The Lady Kate are finding good looking rock. It is much decomposed and show well in silver as well as gold.

The Western Summit, we believe, are not doing much at the present time. This is an incorporated Company, with its business office in this city. The Company has a conflicting claim with Ural, which the Times explains as follows:—

"The Western Summit claim twelve hundred feet; the Ural four hundred feet, supposed to be the same lode. Now, if the Ural should succeed in maintaining the claim to the four hundred feet, there will yet be left to the Western Summit eight hundred feet of the best and richest, or rather one of the best and richest claims in the District. We also learn that both mines are well opened, and can be worked expeditiously.

The Siam is located about midway between the base and summit of "Middle Hill. The Company have incorporated and located their office in this city. The ledge is about three feet wide, and they are sanguine of opening a rich mine.

The "Kinderhook," another very fine ledge is located in the same vicinity. A shaft is now being sunk on the ledge with very flattering prospects.

The Magdalena, under the superintendence of Mr. Robert Howland, are very nearly up to their ledge.

The accounts from the Bodie District are very encouraging; extravagant anticipations are indulged in, the proof of which, it is claimed is a mere matter of time.

Tunneling operations, which constitute an important feature of this locality are progressing most satisfactorily.

[From an Occasional Correspondent.]

SILVER CITY, OAK RUN DISTRICT,  
SHASTA COUNTY, SEPT. 4, 1863.

This new land of silver and gold was unknown in the mineral world until last spring. At that time a few lodes were discovered on Pitt River; this led to more extensive prospecting. Ledges were traced for many miles; a number of mining districts were formed and minerals were found in great abundance. But at that time little was known of their value. The next step, of course, was to ascertain, by assays something of the character and value of the minerals. It was found that lead exceeded in quantity but that silver exceeded in value. The highest assay yet known is from the Keyoma ledge; this has assayed over \$7,000 per ton in gold and silver; other ledges have assayed from \$50 to \$211 per ton in silver. Among these may be named the Silver Creek, General Jackson, North Star, Coon Creek, Sugar Pine, Buckhorn and Union, besides many others of established richness. The mines now present a lively appearance. Many visitors are now there prospecting, or investing small amounts, thereby securing to themselves a portion of the wealth which the labors of others have opened to the world. Cabins are being built, which shows that some are intending to winter in the mines. On most of the lodes above mentioned, work is now going on, shafts or tunnels commenced and rock is being taken out. Some companies on the best lodes are intending soon to forward quantities of rock to San Francisco, calculating on large profits, even after paying freight and the high price for working rock in that city. Will regard to the geography of the country, it is very heavily timbered with pine, fir, oak and cedar, all commingling in dense forest, save where it is too precipitous and rocky for timber to grow. Coal of fine quality exists in great abundance. Geologically it is like all other mineral countries; the predominating rocks are primary limestone, greywacke slate of various kinds, granite, quartz &c., and all is upheaved from its original horizontal position and stands at a dip of thirty to forty degrees. The mineral veins or ledges are interstratified with the rocks, are generally well defined and from four inches to eighty feet in thickness. The mineral veins run N. W. and S. E., and across these, at right angles with them, are numerous creeks, some of which have worn down 50 to 80 feet upon the different ledges, thus having done the work of opening the claims, leaving the "pay rock" exposed for immediate work.

C. P.

A RICH MINE.—The Allison Ranch Mining Company, for a crushing of 24 hours, one day, recently, took out 500 ounces of gold.



# ASSAYS!

Promptness and Accuracy Secured  
By the Use of the Most Improved  
Methods of  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

J. H. CHURCHILL, M. A.,  
(FROM EUROPE.)

Room 24 Government Block, corner of Sansone and  
Washington Streets, San Francisco. jly6

RIEHN, HEMME & CO.,  
ASSAYERS.  
Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.

Assays Made of ores, Minerals  
and Metals.

RECOMMEND WITH PERMISSION TO  
Messrs. F. FAIRBROT & CO., Messrs. ALSOP & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.  
AN. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
assaying, also in Mineralogy and Chemistry as far as re-  
quired to become a practical Assayer.

KCELSOR IRON WORKS,  
712 Sansone street,  
Between Jackson and Pacific, San Francisco. 6

GALLAGHER & KENNEY,  
Manufacturers of all kinds of

Architectural and Ornamental Iron Work,  
Bank and Store Vaults, Safes, Doors, Shutters, Bal-  
cony, Area and Cemetery Railings, Gates, Stairs,  
Etc., and all kinds of Blacksmithing and Job-  
bing done with promptness, and at  
Reasonable Prices.  
Orders from the country promptly attended to.  
jels3

WILLIAM BRODIE & CO.,  
CALIFORNIA FOUNDRY,  
Fremont Street, near Market, San Francisco.

Light and Heavy Castings,  
Every Description, Made to Order. Particular atten-  
tion paid to all kinds of House Work, Plain and Or-  
namental. jyl3

Giffards Injectors,

FOR SUPPLYING BOILERS WITH FEED WATER  
without Pumps No Mill or Mining Company  
could be without one of these valuable Instruments.  
Send for a Circular.

DAVID STODDART, Agent.  
622 Cor. Pine and Front Sts., San Francisco.

PATRONIZE  
HOME MANUFACTURIES!!!

James Longshore,  
Trunk and Valise Manufacturer,  
7 Sansone Street, under Tehama House. Trunks and  
Cases, Wholesale and Retail, Fine Sole Leather Trunks,  
Cases, and a fine assortment of LADIES' TRUNKS com-  
pletely on hand. Trunks covered and repaired.  
jag x

New Style of Ladies' Buckle!

W. BOHM,

INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the  
construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
excels several very important improvements over any  
other in use.

The invention having been carefully examined at the  
Patent Office, has been adjudged to be a useful improve-  
ment, and Letters Patent have been granted for 17 years.  
Excels all other buckles in  
**Usefulness, Strength and Appearance.**  
The Public is respectfully invited to call and examine  
this Buckle at the Jewelry Establishment of  
BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH, BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm," will be  
warranted as to its Strength and Durability.  
W. BOHM, Patentee.

APARTMENTS.

URNISHED APARTMENTS, WITH OR WITHOUT  
Board, at 1018 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
jy6

# THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of the  
most Effective, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
class of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

ALONE STANDING THE TEST.

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to  
combine all the improvements which the experience of  
the past has afforded. They have been

EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ities. They are adapted to

BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent. more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1860, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing complete about 6,000 pounds,  
and the Five Stamp about 7,000. The Mortar Bed being  
cut in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hewes, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino.

MANUFACTURED ONLY BY

GODDARD & CO.,

At the Pacific Iron Works.

SAN FRANCISCO.

on 125 to 136 First street, and 136 to 144

Fremont street.

I. C. E. KLEPZIG & CO.,  
GUN MAKERS,  
...AND...  
DEALERS IN GUN MATERIALS,  
733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.  
Gilding, and also Silver Plating, by E. Ekland. Je21

WANTED,  
GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,  
By FRONTIER A. DEVIERCY,  
437 Pine street, San Francisco.  
au31

John R. Sims,



Oregon street, between Washington and Davis and Fron  
and Jackson streets, SAN FRANCISCO.

Manufacturers of Fire Proof Doors and  
Shutters, Bank Vaults, Grating, Cemetery Rail-  
ings. All orders from the Interior Oregon, Washington  
Territory, Vancouver's Island, British Columbia, or any  
place on the Pacific coast, attended to with promptness  
and dispatch.

Mr. Sims Appreciates the Past  
liberal patronage of his friends, and trusts that he may  
continue to merit it in the future.

For the Information of Strangers  
he would say that he feels confident that his experi-  
ence in his particular calling is surpassed by none on  
this coast, which his superior work, sent to almost every  
town in this state, Oregon, also Victoria and the Sand-  
wich Islands, and to be seen on some of the best build-  
ings in San Francisco, fully attests. A large assortment  
of second hand shutters for sale at low rates. ap13

LEANDER RANSOM,  
Civil Engineer  
AND  
SURVEYOR,

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL  
LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance  
on a credit of several years.

OFFICE: Second floor of Express Building, N. E. cor-  
ner of Montgomery and California streets. oc7-3m

D. NORCROSS,

Masonic Temple, No. 6, Post Street.

Military Goods of all Descriptions.  
Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.

aug 17

FOR SALE.

PATENT PRESSED RUSSIA IRON MINING PANS.

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

UNEQUALLED

MONITOR COOKING STOVE

Or RANGE,

FOR HOTELS.

To which we call particular attention.

je-29

TAY, BROOKS & BACKUS.

UNIFORMITY IN NAMES OF MINING COMPAN-  
IES.—That a great evil is being inflicted upon  
us, as a mining community, in the similar-  
ity of names adopted by our incorporated  
Mining Companies, is patent to every one.  
No sooner is a company incorporated and in  
successful tide of operation, with its stock  
holding a value in the market, than the same  
name is adopted by half a dozen other com-  
panies in some other and perhaps a neigh-  
boring district. If this practice is continued  
it will result in a perfect babel of confusion.  
The practice should be reformed, altogether.  
As a check to this evil why should not some  
prosperous company whose name has thus  
been "borrowed" serve an injunction against  
the use of their name? The evil is a grow-  
ing one and has already arrived at a magni-  
tude which calls for Legislative interference,  
if it cannot be otherwise remedied.

G. E. MOORE,  
Assayer and Analytical Chemist,  
No. 612 Sacramento Street.

HAVING ESTABLISHED A CHEMICAL LABORATORY,  
Furnished with every requisite for delicate Analyti-  
cal work, is prepared to execute the Assay and Analysis  
of Ores, Mineral Waters, Guanos, etc., with accuracy  
and dispatch.

REFERENCES:

Prof. J. D. Whitney, State Geologist, San Francisco.  
Alsop & Co., San Francisco.  
Sather & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento. sep14

PEOPLE'S  
OPPOSITION  
Steamship Line!

Special Notice.—The Steamers of this  
Line have been withdrawn from the Ni-  
caragua Route until further notice.

GREAT REDUCTION IN RATES!!!

The Fast and Favorite Double Engine Steamship,  
MOSES TAYLOR,  
J. H. BLETHEN..... COMMANDER  
Will be dispatch for PANAMA

From Mission street Wharf,  
SATURDAY, - - - OCTOBER 3, 1863

Punctually at 9 o'clock, A. M., on  
Connecting at Aspinwall, by the Panama Railroad, with  
the Splendid Steamship

ILLINOIS - - - 2500 Tons.

The Moses Taylor, since her last trip has undergone  
the most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins enlarged, refitted and  
repacked throughout—making her accommodations equal  
to any steamer on the ocean.

For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

BOOK KEEPING,  
Penmanship

AND  
COMMERCIAL CALCULATIONS,  
Taught by J. S. LUTY

PRACTICAL ACCOUNTANT,  
305 Montgomery Street, Corner of Pine.

TO QUARTZ MINERS.

All persons interested in Mining Ma-  
chinery are invited to call at Donahue's Foundry and  
examine my improved Amalgamator. It is unquestion-  
ably superior to anything now known for amalgamating  
Silver and Gold. It works 1000 pounds at a time, and  
will amalgamate over three tons a day. By the motion  
of the revolving muller, the pulp is drawn through its  
centro and passes under it, between the grinding sur-  
faces, to the circumference; from whence it passes again  
over the muller to the centre, through the holes and be-  
tween the grinding surfaces to the circumference as be-  
fore. Thus a constant circulation of the pulp is kept up,  
bringing the particles of ore again and again under the  
muller, and reducing the whole mass to an imalpable  
powder.

No quicksilver lies between the surfaces to be ground,  
but at the circumference and centre of the pan where the  
metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in De-  
cember last, and all persons are again warned against  
purchasing machines made at the Miners' Foundry called  
"Wheeler's Amalgamator," as they are an infringement  
on my patent, and a suit is now pending in the U. S. Cir-  
cuit Court against the party infringing. My Amalgam-  
ators can be seen running at Donahue's Foundry, where  
all can judge of their operation and the very superior  
style in which they are being manufactured.

THOMAS VARNEY.



## THE MINERAL WEALTH OF WASHOE.

In considering the mineral wealth of Washoe, at this present writing, we wish to be understood as confining our remarks to a very small portion of the region known by that name. We would include Virginia City, Gold Hill, Silver City, Empire, Ophir and Dayton, embracing a parallelogram say of eight miles in length by two in width. The famous Comstock lead passes through this district, and furnishes the chief, but by no means the entire amount of the precious metals which is taken therefrom.

Perhaps the most reliable data from which to estimate the yield of this district, is that recently furnished the Territorial Enterprise by Wells, Fargo & Co's agent in Virginia City. From that data it appears that the following, expressed in round numbers, passed through that office during the period specified below:

For the quarter ending April 1, 1862,.....	\$ 270,000.
" " " " July 1, ".....	570,000.
" " " " Oct. 1, ".....	800,000.
" " " " Jan. 1, 1863,.....	956,000.
" " " " April 1, ".....	1,270,000.
" " " " July 1, ".....	1,600,000.

Total amount for the past eighteen months, \$5,466,000.

The rapid and uniform increase of the above amounts, from quarter to quarter, is perhaps the most interesting and suggestive idea connected therewith. No one at all familiar with the present rapid progress which is being made in the development of the mines in and about Virginia City can for a moment doubt but that the quarterly shipments will continue to gradually improve for many years to come. The same authority has set down the yield of the entire district, under present consideration, for the year 1863 as follows:

Virginia City,.....	6,900,000.
Silver City and Gold Hill,.....	10,000,000.
Empire, Ophir and Dayton,.....	8,000,000.
Add in excess for Virginia City,.....	1,000,000.

\$25,000,000.

For manifest reasons, which must fully appear in the actual returns of the two quarters of the present year already passed, we have added \$1,000,000 to the estimate for Virginia City, making the total estimated yield of 1863 foot up Twenty-five millions of dollars—a pretty good yield for a section of country embracing not more than thirty-six square miles. The next year will doubtless largely increase the amount.

The best evidence of the correctness of this estimate is the value at which the leading claims are held in this district. We append a list of the claims on the Comstock lead commencing with the Ophir and running south and including the Yellow Jacket, with the number of feet in each claim, and the market value of the same.

1. Ophir.....	1,400	\$2,500	\$3,600,000
2. Mexican.....	100	10,000	1,000,000
3. Central.....	150	1,500	250,000
4. California.....	300	1,700	510,000
5. Central No. 2.....	150	1,000	150,000
6. Kinney Ground.....	60	12,000	72,000
7. White & Murphy.....	210	700	147,000
8. Dick Sides.....	500	600	300,000
9. Best & Belcher.....	225	1,000	225,000
10. Gould & Curry.....	1,200	5,000	6,000,000
11. Savage.....	800	3,000	2,400,000
12. Hale & Norcross.....	400	1,700	680,000
13. Chollar or Potosi.....	1,400	1,000	1,400,000
14. Fairview or Bullion.....	1,200	1,500	1,800,000
15. Apple & Bates.....	10		
16. Omega S. M. Co.....	290		
17. Gold Hill Co. No. 1.....	300		
18. Gold Hill, No. 2.....	300		
19. Alpha G. H. M. Co.....	300		
20. Imperial S. M. Co.....	118		
21. Fairfax, Doax & Co.....	45		
22. Sheldon & Graves.....	32 1/2		
23. Hamilton & Co.....	22 3/4		
24. Grissom & Co.....	20		
25. Sparrow & Co.....	20		
26. Hamilton & Co.....	20		
27. Mrs. Plato.....	10		
28. L. S. Bowers.....	20		
29. Winters & Booth.....	20		
30. John D. Winters.....	30		
31. Coover & Co.....	21		
32. Sice Company.....	13 1/2		
33. Imperial S. M. Co.....	65 3/4		
34. Winters & Co.....	50		
35. Dall & Davis.....	25		
36. Johnson & Ladman.....	25		
37. Rogers & Whipple.....	25		

.....3,836,000

28. Arington & Co.....	25		
39. Irvin & Co.....	30		
40. Burke & Hamilton.....	40		
41. Stewart & Co.....	30		
42. Yellow Jacket.....	1,200	1,000	1,200,000
	11,213		23,470,000

The above Companies from No. 1 to No. 21, are incorporated, with the exception of No. 16. From No. 22 to No. 42, the ground is all held in private hands with the exception of No. 34 which is associated with 21.

Numbers 16 to 43 inclusive comprises what is known as the Gold Hill portion of the Comstock Ledge. The total number of feet included in the above claims is 11,213, which, at present actual selling rates cannot be valued, in the aggregate, at less than \$24,000,000, or an average of a little over \$2,000 per foot. This estimate includes only those claims which are located directly upon the Comstock lead.

There are known to be numerous parallel leads in close proximity to the Comstock and more or less continuous, throughout almost its entire extent, all of which are more or less valuable, and in some of which the stock is held at from one or two hundred, to one thousand dollars per foot. To the north of the Ophir is Cedar Hill, which holds an immense store of metal, the value of which is daily becoming more and more apparent. Far up and all along the Eastern Slope of Mount Davidson, are leads, many of which are already assuming quite a prominence in the market. To the south of Gold Hill and the claims we have enumerated in that district, and down through Silver City, are still other numerous claims located within the sixteen miles square to which we are confining our remarks.

In all of these values we have taken no account of the city itself, with its numerous blocks of buildings and real estate, its immense stocks of merchandise, etc. We have moreover based our estimates at actual cost values in gold, where common labor is worth from \$1 to \$5 per day, and where money is worth from 2 to 4 per cent. per month, on good security.

As a further evidence of the richness of a portion of this ground, it is stated on good authority that the little strip of 468 feet between Nos. 20 and 35, has yielded not less than \$6,000,000, within the last three years—some portions of it having yielded \$3,500 per foot in a single month! Five feet changed hands in No. 26, within a year, at \$10,000 per foot. Some of the owners in this strip of 468 feet have made and spent a fortune in a month; others have pocketed and invested from \$10,000 to \$20,000 per month, clear of expenses. When people talked of \$4,000 and \$5,000 per foot in the early days of Washoe, they were set down as lunatics. Now the solid bars that are turned out every week, are pointed at, as indicative of the wisdom of the whilom visionaries, while the croakers of those days are now nearly crazy with vexation at their former faithlessness in the value of these mines!

Of the total number of 11,213 feet enumerated in the Comstock ledge, only about 4,000 have as yet been developed into dividend paying grounds; some two or three thousand feet more will probably be added to the dividend paying list inside of six months, and from 9,000 to 10,000 feet of this ground will be dividend paying within about one year from the present time; which developments will add very many millions to the value of the ground, and corresponding millions to the annual shipments from the district.

The developments in Reese River within the past six months, have fully equaled if not exceeded anything which was ever witnessed in Washoe, and there is good reason for believing that three years will do fully as much for that country as the same time has done for Washoe! The ball is in motion and now moves on by its own impetus. The probable result, figure it how we may from reliable data, is absolutely astounding.

Only a few months since, in common with most of our cotemporaries, we joined in deprecating the Report of the Secretary of the Interior in his estimates of the probable future yield of the mines of the Eastern Slope; but the results of the past few months have put altogether a new face upon the matter, and we are forced to acknowledge that the Hon. Secretary, is not so very bad at guessing, after all.

With all this prospective wealth, however, it should not be forgotten, that mining, even in the limited and immensely rich territory to which we have confined these remarks, is but a mere lottery, where the blanks far outnumber the pri-

zes. Taking the district as a whole, including outside claims hundreds will amass fortunes by judicious investments while thousands will lose by reckless ones.

**THE BOUNDARY QUESTION.**—The Boundary Commissioners now running the line between California and Nevada Territory have progressed so far with their work as to determine that Aurora City, lies about four miles to the eastward of the California line, while Honey Lake Valley, which had been pretty much given up to Nevada Territory, is found to be within the State of California. California will be a gainer in territory, but a loser in population by the adjustment; but a question of much vexation and inconvenience will be definitely settled.

**SILVER IN IDAHOE.**—Rumour says that silver bearing lodes have been discovered in Idaho Territory. A San Francisco company was incorporated in this city on Monday last to work one of these mines.

## THE MINING SHARE MARKET.

The Mining Share Market still continues quiet. The chief excitement of the week has been the defaults of certain speculators who have failed to come to time on some of their engagements. The market has been well tested, during the past week, some of its leading shares which were well sustained, though freely offered.

Ophir has been largely dealt in, 900 share having changed hands at from \$1,995 @ \$2,125, closing at \$2,000 firm. The dividends of this company will not be increased until after their new works are fully completed. A decided improvement in this stock may be looked for after that time.

Since the "cave" three or four hundred tons of ore have been taken out from an old pillar in the south part of the Mexican mine. This pays about \$200 per ton. During the past four years the ore taken out of this mine came from the southern portion of it, and at the time the accident occurred this portion had been pretty much worked out. As soon as their new shaft is completed they will drift to the northern portion of the mine and work exclusively in that. There is no stock of this mine in the market.

Gould & Curry has been but little dealt in during the week. A dividend of \$150 per foot was declared on Saturday, payable to-morrow. It is understood that the Directors might have declared \$175, still leaving a heavy balance for October, but the majority ruled otherwise. The total assessments from the start have been but \$150 per foot; the yield of the mine having furnished the balance of the heavy sum of fully \$700,000, which their mill and mining improvements have cost. The company has determined to still further increase the working capacity of the mill which they can now do without any interference with their usual dividend. The monthly yield of this mine alone, at the present time, is not far from \$400,000, while its monthly dividends are about 3 per cent. on its present market value of \$5,000 per foot.

Potosi Shares are much in favor, with but few offers. It is readily taken at \$1.150.

Savage is quiet at present. Chollar, ditto.

Best and Belcher are not much offered, and closed at \$825, although an assessment of \$100 per foot was levied on the 24th instant.

Hale & Norcross has not been enquired after. The mine works of this company will soon be equal to the best in the Territory.

Mexican No 2, which we suppose to be the same as that quoted "Spanish No 2" has met with considerable favor, and is quoted at a large advance.

This Company, we understand has struck very rich rock. Sales have been made the past week from \$37 @ \$60. It is confidently expected this stock will still further and materially advance.

## COPPER.

The copper trade is already beginning to assume considerable commercial importance. The shipments from the mines at the present time, are estimated at fully 1,000 tons per month, which will produce very nearly 200 tons of pure copper, worth about \$125,000. By the opening of another spring, this amount will probably be trebled. A large number of promising mines are now commencing to ship, whose ca-



facilities for raising ore will be increased several hundred fold within the coming six months.

The present rate of shipments does not fairly represent the quantity of ore being raised, however, from the fact that many mines are declining to sell at the prices now offering preferring to hold on to their ores until spring. Moreover a large portion of the ore now being raised, must remain at the mouth of the mines until some mode of concentrating the same has been adopted. The machinery now in process of erection by the Messrs. Pownings, at Copperopolis, will probably, soon begin to add largely to the production of shipments ore from that locality.

Buyers rates for copper ores, deliverable either in this city or at Antioch, are at present as follows, payments made in gold:—\$2 per one per cent. for ore yielding 8 to 12 per cent.; \$2 25, from 12 to 14 per cent.; \$2 50 for 16 per cent., and \$3 for 20 per cent. and upwards.

Copper mines do not appear to be suffering from the general depression so prevalent in other mining stocks. Although but little of this class of ore is offered at our Stock Boards, we are advised that there is considerable enquiry for this class of investment throughout the State, and much capital will soon be absorbed in this growing interest. The permanency of copper mines and their superior reliability, over other mining stocks, for investment, is beginning to be fully appreciated.

More copper discoveries are reported in the vicinity of Ione City, Amador county. These discoveries are supposed to be on the range of the famous Newton mine.

The Home Ledge, El Dorado county, has made its second shipment during the past week, 144 sacks. It comes to this city.

Several hundred tons of ore were received from the Napoleon by the Stockton boat on Monday last. A letter from one of the proprietors of the Oriental assures us that that company is now taking out ore in considerable quantity, and that their first shipment will soon be made.

Another extensive copper ledge has been discovered by prospectors from Marysville, in the vicinity of Brady's Ranch. The croppings are said to be rich and extensive. There is less excitement, now, concerning the Yuba copper lodes, but there is also more confidence and industry in developing them.

The Nevada Transcript of the 23d inst. says:—"Several companies, in the copper region in the lower part of the county, have struck fine leads. Among them are the General Hooker, Wild Irish and Copperhead. Several prominent copper men from San Francisco and Copperopolis have visited these mines within the past two weeks and pronounced them as rich as any in the State—Copperopolis not excepted. The owners of the above companies are pushing their shafts ahead and we shall soon expect to hear of heavy shipments of copper ore from this region."

The Mountain Messenger speaks very encouragingly with regard to the "copper fields" in the vicinity of Gibsonville, Sierra county. The Eagle Company is spoken of as having a ledge of concentrated mineral five or six inches thick at a depth of 50 feet. The Newark ledge "contains a bronze like deposit of native copper, disseminated through the rock in delicate sheets and fine particles. Ounce nuggets of pure copper have been repeatedly found in the hydraulic diggings crossed by this ledge." Native copper has been found in all the tunnels crossing the course of the Slate Creek ledge at Mt. Pleasant, but none of them have been run low enough to strike the solid ledge.

The Isabella lode, in Sierra county, is attracting considerable attention. The ore from this mine yields largely in silver. It is thought that the silver it contains will pay the entire expense of working the vein. Moderate sums are offered for shares, but no sellers are found. Work upon all the ledges in the neighborhood of Round Tent, Nevada county, and Empire Ranch, are being vigorously prosecuted. The Burra Burra and Rock Creek Consolidated Company have a well timbered shaft down fifty feet, with encouraging prospects.

The work of development on the Mount Diablo Copper Mines is still progressing, with improving prospects. The Mechanic's claim has a tunnel in 60 feet, most of the distance in hard rock; 17 feet more will strike the vein. The Keokuck have a tunnel in 65 feet. This company find three series of croppings on the surface. As the miners go down

the three are coming together. There are several other good claims in this vicinity. The Mount Zion is generally considered at the head of the list. The Great Republic has a mammoth 17 feet lead, which prospects well in silver as well as copper. The Rising Sun, the Hall, Uncle Sam, Eagle, Sam Moore, Copper Age, Ramelia and many other companies are located in this vicinity.

#### REPORT OF BIDS At the San Francisco Mining Stock Board, For the week ending Sep. 26, 1863.

Name of Companies.	Shares per ft.	Per Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Latest Asking Price.
<b>WASHOE STOCKS.</b>									
Ophir	12	3300	3050	2160	2080	—	1500	1975	2000
Gould & Curry	1	500	450	400	4800	—	—	—	4000
Savage	1	1	2500	2700	—	—	—	—	2000
Chollar	4	500	900	900	850	—	900	925	1000
Potosi	12	500	1125	1150	1150	1160	—	—	1000
Hale & Norcross	12	400	1700	1600	—	—	1500	1750	—
Sierra Nevada	1	500	92 1/2	95	—	90	90	90	92
Danby	4	500	100	105	105	105	110	114	114
Burning Moscow	1	100	120	119	120	125	137	140	130
Burnside	1	300	35	37 1/2	37	37 1/2	39	40	40
Mercedita	1	125	—	15	16	17	16	18	21
Charles Canby	1	30	—	15	16	17	16	18	21
Sacramento	1	500	—	—	50	—	45	50	75
Iowa	1	—	—	—	—	—	—	—	75
El Dorado	1	—	62 1/2	60	55	51	60	58	80
Norton	1	—	4	3	3	—	4	—	4
Adriatic	1	—	6 1/2	6	6	—	4 1/2	4 1/2	20
Brennus	1	—	—	—	—	—	—	—	6
Pride of the West	1	—	—	50	—	50	—	—	47
G. H. Quarz M. Co.	1	—	—	—	—	—	—	—	—
Imperial	1	100	—	—	—	1	350	—	450
Cedar Hill Tunnel	1	100	—	—	—	—	—	—	3
Mount Davidson	1	200	—	2 1/2	—	—	1	—	3
Central	12	300	—	—	—	—	—	—	8
California	12	300	—	—	—	—	—	—	8
Rogers, F. D.	1	250	—	—	—	—	—	—	—
Lucerne	1	100	—	—	—	—	—	—	—
Lady Bryan	1	500	—	—	—	—	—	—	—
La Crosse	1	—	—	—	—	—	—	—	—
Moss	1	—	—	—	—	—	—	—	—
Porter	1	—	—	—	—	—	—	—	—
Crown Point	1	—	—	—	—	—	—	—	1350
Manhattan	1	—	—	—	—	—	—	—	5
Hudson	1	—	—	—	—	—	—	—	8
Lady Ellen	1	—	—	—	—	—	—	—	12
Schiller	1	—	—	—	—	—	—	—	120
Seneca	1	—	—	—	—	—	—	—	25
Voculvis	1	—	14	16	10	15	—	16	60
<b>ESMERALDA STOCKS.</b>									
Wide West	1	600	60	63	65	65	75 1/2	92	95
Antelope	1	500	135	130	—	140	—	200	200
Esmeralda	1	1000	—	—	—	20 1/2	22	22	22
Real Del Monte	1	400	415	—	425	440	—	440	440
Utah	1	250	—	—	—	—	—	55	55
Silver Hill	1	500	—	—	—	—	—	30	30
Nevada	1	250	—	—	—	—	—	16	16
Federal Hope	1	—	—	—	—	—	—	—	—
South Utah	1	—	—	—	—	—	—	—	—
Jenny Lind	1	—	—	—	—	—	—	—	—
Falls of Clyde	1	—	—	2 1/2	3	—	—	3	3
Sunbeam, s. w. ex.	1	—	—	—	—	—	—	—	2
Bancho	1	500	—	—	—	—	—	—	50
Great West Tun.	1	—	—	—	—	—	—	—	2
Burlington	1	—	—	—	—	—	—	—	60
El Paso	1	—	—	—	—	—	30	—	—
Crockett	1	—	15	16	—	12 1/2	11	12 1/2	65
Aetna	1	100	—	—	—	—	—	—	—
<b>COSO STOCKS.</b>									
Josephine	2	250	—	—	6	—	—	13	10
Willow Springs	1	100	—	—	—	3	—	—	—
Empire	1	—	—	—	—	—	—	—	—
Coso	1	600	14	10	10	11	12	—	15
<b>MEXICAN MINES.</b>									
Mina Prieta	1	1000	—	—	—	—	—	—	—
Dios Padre	1	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	1	600	80	75	70	60	70	70	87
Josephine	1	—	7	5	8 1/2	—	—	—	8
<b>ESMERALDA STOCKS.</b>									
Laurel Hill	1	—	3	—	—	3	3	—	6
Rhodes Diggings	1	—	—	—	12	—	—	—	14
Eureka	1	—	—	—	—	—	—	100	100
Fellowes	1	—	—	—	70	—	50	—	80
Rock River	1	—	—	—	—	—	—	65	65
Hecla	1	—	—	—	—	—	—	—	—
<b>ESMERALDA STOCKS.</b>									
De Soto	1	—	—	—	—	—	—	50	50
Great Basin	1	—	—	—	—	—	—	8	8

#### SALES FOR THE WEEK ENDING SEPT. 19, 1863.

Company	Shares	Price	per foot.
Ophir	900	\$1995 @ \$2125	
Falls of Clyde	20	3	
Great Western Tun.	—	—	
Josephine	—	—	
Coso	—	—	
Gould & Curry	8	4,975	
Savage	—	—	
Chollar	4	1,000	
Pride of Washoe	50	15 @ 16	
Bullion	35	55 @ 57 1/2	
Esmeralda	43	21 @ 22 1/2	
Melones	125	77 1/2 @ 110	
Laurel Hill	10	3	
Willow Consol.	20	20 @ 28	
Branch Mint	10	15	
Die Vernon	60	20 @ 30	
United Cosmopol.	5	22 1/2	
Union, G. H.	92	50 @ 65	
Union, R. D.	70	2 1/2	
Rhodes Diggings	8	13	

Hale & Norcross	—	—	—
Uncle Sam	71	85 @ 103	—
Echo	4	40	—
Baltic	—	—	—
El Dorado	14	65	—
North Potosi	213	37 1/2 @ 41	—
Caledonia Tun. Co.	50	35 @ 37	—
Independent, G. H.	—	—	—
Silver Hill	—	—	—
Garibaldi	—	—	—
Bodie Bluff	137	2 3/4	—
Willow Springs	30	5 1/2	—
Sheba	80	105 @ 122 1/2	—
De Soto	—	—	—
Monte Christo	—	—	—
Birdsall	—	—	—
Bob Black	—	—	—
Techattucup	—	—	—
Napoleon	—	—	—
Fellowes	—	—	—
Potosi	20	1150 @ 1300	—
Yellow Jacket	14	1050 @ 1125	—
Imperial	—	—	—
Overman	12	475 @ 500	—
Best & Belcher	4	825	—
Sierra Nevada	75	92 1/2 @ 95	—
Burnside	444	101 @ 114	—
Burning Moscow	62	120 @ 137 1/2	—
Charles Canby	75	16 @ 22 1/2	—
Baltimore American	—	—	—
North American	134	56 @ 62 1/2	—
Bullion (G. H.)	—	—	—
Pride of the West	—	—	—
Spanish No 2	262	37 @ 60	—
Norton	55	4 @ 4 1/4	—
Burnside	—	—	—
Adriatic	12	4 1/2	—
Iowa	—	—	—
Madison	—	—	—
Buckeye	174	25 @ 34	—
Lucerne	—	—	—
Lady Byron	55	9 @ 10 1/2	—
Mt. Davidson	—	—	—
Cedar Hill Tunnel	—	—	—
North Ophir	—	—	—
Wide West	199	63 @ 100	—
Real Del Monte	48	420 @ 450	—
Utah	—	—	—
Pond	52	225 @ 300	—
Grass Valley	—	—	—
Michigan, G. H.	—	—	—
Ural	—	—	—
Bodie No 2	50	4 1/4 @ 11 1/2	—
Blue Ledge	270	8 @ 11 1/2	—
Napoleon, Copper	—	—	—
Oncida	—	—	—
St. George	—	—	—

#### ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, Sept. 17, 1862.]

Company	Bid	Asked	Bid	Asked
Alpine	8	10	Lilly Dale	20 35
Amador	5	5	Live Yankee	20
Atlantic	5	10	Lord Byron	12
Arado	5	10	La Plata	12
Aurora Tunnel	5	8	Lizzie Light	2 5
American Freeman Tun.	7	10	Middle Hill Tunnel	6 9
Antelope	200	250	Main Esmeralda	40
Alturas	15	20	Mourne	10 20
Aetna	5	10	McKinstry Tunnel Co.	—
Brazili	10	20	Monte Christo, Tunnel co.	40
Bodie Bluff Consolidation	9	10	Mud Lake	10
Bunker Hill	8	8	Mount Bruley	10
Bright Star	15	15	Mary L. Gardiner	125
Bamboo	100	100	Mina Real	15 18
Brewster	10	20	Martinez Tunnel	3 8
Bullion (Van Horn Dist.)	3 1/2	10	Meredith	15
Bodie Bluff, No. 1	3	10	North Willow Springs	80
Bodie Bluff, No. 2	18	18	New Esmeralda Consol.	2 6
Bonaparte, Tunnel comp.	5 1/2	10	Newton	1
Caucasian	—	—	Nevada, (Tunnel)	—
Climax	11	10	Ozark	20
Crockett	75	75	Old Winnemucca	6
Cape	5	5	Paul Tunnel Co.	5
Clan Alpine	7	7	Pacific	—
Consolidation	—	—	Pond	65
Dargun	—	—	Pride of Washoe	10 15
Delta	8	8	Peru (two ft. to the share)	15
East Essex Ex. Ural	10	10	Pennsylvania Tunnel Co.	6 10
Excelsior, Excelsior Dist.	20	25	Real Del Monte	410 450
Empire	20	25	Rebecca	12
Franklin Tunnel company	10	10	Red, White & Blue	10
Fallstet	—	—	Stanford Tunnel Co.	15
Fallstet, Consolidation	—	—	Schenck	—
Fresho	12	12	Strawberry	—
Falls of Clyde	8	8	Silver Hill	60
Great Eastern	8	8	Silver Hill, Bodie District	15
General Hooker (Con.)	5	5	Seymour	—
General Jackson	—	—	St. Louis	—
Garibaldi	30	30	Tuscan	—
Golden Harvest	6	6	Tiger	15
Golden Cross	6	6	Tucker	15
Governor Seymour	25	25	Tennessee	25
Golden Age	40	40	Union Tunnel	20 30
Great Britain	5	5	Utah	120
"Golden Era" Tunnel Co.	—	—	Ural proper	165 185
Greenback	20	20	Ural (extension)	5 10
Honor	20	20	William Tell	—



## THE VALUE OF AN ASSAY—A CAUTION.

A gentleman last week was on the point of concluding a large sale of copper on the basis of a 10 per cent. yield—which was the estimate of a large house who proposed to buy. In time, however, to avert loss, he was induced to have an assay made.

The mean of three assays made to his order by Mr. J. H. Churchill of this city, amounted to 20.31 per cent. of metal. A buyer was found who accepted this estimate; the seller finding the cost of an assay a very small item in his savings.

The Humboldt Register publishes the following rather heavy item:

We see that a company has incorporated in San Francisco with an extravagant capital stock. It is the 'Humboldt Peak' G. & S. M. Co.—Capital stock \$3,960,000, in 3,960 shares of \$1000 each. Trustees, Robert Beck, L. B. Harris, L. Gers, J. M. Frey and G. W. Stewart. Don't know whether they reserved in trust deed the right to increase capital stock; but that already named ought almost to build a railroad to California.

The prevailing idea that lightning always strikes the tallest of a group of objects, was disproved at Woonsocket, Mass., when a cottage entirely surrounded by higher buildings and trees received the whole of a stroke.

An English Minié bullet and a Springfield rifle-ball met in the air during the siege of Vicksburg, were welded by the impact, and fell harmless to the ground. They are now firm friends, sticking each to the other closer than a brother or a lover.

## MINING LAWS AND FORMS

JUST PUBLISHED BY H. H. BANCROFT & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth, \$1.50. For sale at all the Bookstores. sept14

**R. W. MYERS, & CO.,**  
Chases' New Mill, Fremont St., near Market,  
DO  
**JOB TURNING & SCROLL SAWING.**

**BRACKETS,  
RED WOOD BALUSTERS,  
NEWEL AND CEDAR BALUSTERS  
for Stairs.**

Manufacturers of every description of Oval,  
Circular and Square  
**PICTURE & LOOKING GLASS FRAMES**  
For the Trade at New York Prices.

**All kinds of Designs for Building.**  
R. W. MYERS. H. C. SOMES

**R. W. FISHBOURNE,  
PRACTICAL LITHOGRAPHER,  
ENGRAVER AND PRINTER,**

**NO. 529 CLAY ST., CORNER OF LEIDSDORFF,**  
San Francisco, State and County Bonds, Stock  
Certificates, Bills of Exchange, Bills of Lading, Bank  
Checks, Landscapes, Architectural and Marine Views  
Show Cards, Labels, Etc., executed with neatness and  
dispatch. N. B. All orders in Crayon Work promptly  
attended to.

## MINING.

N. B. Mining Stock Certificates executed with prompt-  
ness and dispatch, and at greatly reduced rates. jy6

**MYERS & DAGGETT'S  
Mining and Stock Exchange,**  
No. 23½ B Street, Virginia City, N. T.

**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every descrip-  
tion promptly and confidentially attended to.

\*\*\* Abstracts of Titles Furnished, Etc.

## GENERAL NOTICES.



**DR. H. AUSTIN,  
DENTIST,**

**No. 634 Washington street,**  
Between Montgomery and Kearny, (over San Francisco  
Baths.)

I have recently received from London a New and  
Beautiful Vulcanite (India Rubber) for Artificial Teeth,  
which is far superior to any other ever used. It is light  
cleanly and durable, and of a natural color. The cheap-  
est and best material for temporary (and in many cases)  
permanent sets. All operations thoroughly performed,  
and at reasonable prices. Je-29

**DESKS  
AND  
Office Furniture,  
OF ALL KINDS..... FOR SALE BY**

**JOHN WIGMORE,**  
**No. 423 CALIFORNIA ST., SAN FRANCISCO.**

OFFICE JOBING, of all Kinds, attended to.

**SQUARZA'S PUNCH.**  
**FIRST PREMIUM**  
AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.

**ALSO; FIRST PREMIUM**  
At the San Francisco Bay District Agricultural Fair, 1862  
MANUFACTORY, WHOLESALE AND RETAIL,  
**No. 44 Leidsdorff street,**  
Opposite the What Cheer House, San Francisco.

**CHARLES GEDDES,  
ARCHITECT,**  
Cor. Montgomery and Bush Streets,  
Over the Mercantile Library Rooms.  
Jy 20 San Francisco

**FREDERICK MANSELL,  
MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,**  
**No. 422 California street, corner of Leidsdorff**

Drawings of MODELS made for parties applying for pat-  
ents at Washington or London. mar23 2m

## New Patent Agency.

**WE HAVE CONNECTED WITH THE**  
Publication of the "MINING AND SCIENTIFIC PRESS"

**The Patent Agency Business,**  
And would invite Inventors and Discoverers on the Pacific  
coast, who wish Dispatch as well as Economy to call  
upon us. We have an Experienced Agent at Washing-  
ton, which, together with our own experience of several  
years, renders the  
**Mining and Scientific Press Agency**  
The most desirable place to make application for Letters  
Patent on the Pacific coast. Apply at  
Office of the "Mining and Scientific Press," Room  
No. 57, Government House, corner of Washington and  
Sansome streets, San Francisco. EWER & SMITH.

**FOREIGN PATENTS OBTAINED**  
By application at this office. Room 57, Government House,  
EWER & SMITH, Solicitors.

**NOTICE TO INVENTORS.**  
Inventors wishing to file Patents should apply at this  
Office, Room No. 57, Government House. Terms moder-  
ate. EWER & SMITH.

**PATENT RIGHTS.**  
Patent Rights Bought and Sold,  
At the office of the "Mining and Scientific Press" Agency  
EWER & SMITH.

**IMPORTANT TO INVENTORS.**  
Inventors who obtain their Patents through this Office  
can have their Inventions illustrated and described in  
the columns of this paper FREE of charge, they merely  
furnishing the engravings. We are also prepared to fur-  
nish engravings at reasonable rates. Those who do not  
care to go to the expense of having engravings prepared  
can have their inventions fully noticed and described in  
our columns, free of charge. The free use of our col-  
umns to aid them in introducing their inventions to the  
public will be found a most important advantage to in-  
ventors. EWER & SMITH.

**Offices To Let,**  
In the Government House, Corner of  
Washington and Sansome Streets. Two large suits of  
Offices, the most commodious and accessible in the city.  
C. A. CRANE, Proprietor

## GENERAL NOTICES.

**HAYNES & LAWTON,**

IMPORTERS AND DEALERS IN

**CROCKERY,  
GLASS WARE,  
FRENCH CHINA,  
Coal Oil Lamps, Table Cutlery  
CLOCKS,  
Silver Plated and Britannia Ware,  
ETC., ETC., ETC.**

**NO. 516 SANSOME STREET**

[CORNER OF MERCHANT.]  
SAN FRANCISCO.

**WHEELER'S  
Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the prin-  
ciples and witnessed the operation of these Pans, that  
they are decidedly superior for triturating and amalga-  
mating purposes to any other in use.

The most important principle connected with the op-  
eration of these Pans is the separation of the triturating  
process from that of extracting the amalgam from the  
sand. The chief cause of loss of the precious metals aris-  
es from the passing off of the same in combination with  
the quicksilver, during the process of triturating, and in  
cleaning up. By the introduction of the Separating Pan  
to follow the triturating this loss is entirely avoided. In  
working these machines there is no appreciable loss of  
quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated  
by the side of others on sands from the same vat, the  
Wheeler Pans have uniformly gained a large percentage  
of metals over its competitors, as well as a still larger  
percentage in the amount of work performed.

\* \* \* These Pans have been in daily operation at the  
Miner's Foundry, on First street in this city, where all  
interested are invited to call and examine for themselves.  
2016-1f ZENAS WHEELER.

**Wm. P. TAAFFEE,**

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,  
CARPETS, DUCK, ETC.,  
Cor. Front and Sacramento streets,  
SAN FRANCISCO.**

## REMOVAL.

**OFFICE OF THE PACIFIC METAL**  
Surgical Office is removed to 509 Sacramento street  
Having enlarged our Works at North Beach, we are  
now enabled to reduce from 10 to 15 tons of Silver or  
Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Sil-  
ver smelters' sweepings reduced or purchased.  
COPPER ORES—Highest market prices advanced in  
cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

**NATHANIEL GRAY,  
General Furnishing Undertaker,  
641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.**

GEO. A. METCALF.

D. S. HUTCHINSON.

**METCALF & HUTCHINSON'S  
PHOTOGRAPHIC GALLERY,  
650 Washington St. Three doors below  
Kearny.**

Having refitted the above rooms the Firm are now  
prepared to furnish the public with a superior style of  
Picture, at a lower price than ever before offered in the  
city.

## CARD PICTURES.

As we have every facility for producing these beau-  
tiful pictures, in all their different varieties, we have re-  
duced the price to

**\$3. Per Dozen!**

Large sized Photographs \$3—Extra copies \$1 each.  
AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any  
style desired. Particular attention paid to pictures of  
Children.  
Pictures painted in Oil or Water Colors, and retouched  
in India Ink by a competent artist. aug.

## HOTELS.

**International Hotel,**  
JACKSON STREET, ----- SAN FRANCISCO  
[A few doors above Montgomery.]  
**FIRE-PROOF BRICK BUILDING.**

Most convenient to the  
Steamer's Landing, Business sts. & Places of Amusement  
**OPEN ALL NIGHT.**  
City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FUR-**  
nished this spring. Every Room opens to the Light  
and Air. Each room is furnished with a first quality  
Patent spring Bed and Hair mattresses. The Internation-  
al offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**  
and sets as good a TABLE as any House in the City.  
I am determined that the INTERNATIONAL shall be the  
most comfortable, best regulated, and in all respects su-  
perior to any like establishment in the state, and shall  
aim to merit a continuance of the popular favor it has  
enjoyed heretofore. It will be conducted on Temperance  
Principles.

**F. E. WEYGANT, PROPRIETOR.**

**Tremont House,**  
418 and 420 ----- Jackson Street,  
[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY**  
advantages to the traveler for convenience. It is  
only half a block from the Post Office and Custom House,  
and about the same distance from the principal places of  
Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,  
WHICH SECURES TO OUR GUESTS QUIET.  
The prices for board and Rooms are very moderate—  
by the day, meal or week. WE SOLICIT A CALL FROM ALL  
F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have tak-  
en and refurnished the INTERNATIONAL HOTEL, and will  
carry on the two houses in connection, so that Travelers  
wishing to put up at either house, may take the Tremont  
or International Hotel Coach and be taken to either House  
with their baggage, FREE.

**F. E. WEYGANT.**

**THE RAILROAD  
HOUSE.**

**Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.**

**H. T. FELTON - - - W. C. MINOR,  
PROPRIETORS.**

The above House is a Fire-proof building, with Granite  
Front, and kept on the European Plan, with board and  
lodging by Day or Week to suit the convenience of our  
Patrons.

**The Rooms are handsomely furnished,**  
applied with Patent Spring Beds, and Hair Mattresses,  
affording very superior accommodations for families or  
single persons.

The Table is supplied with the best the market affords  
at prices to suit the times.

The Rail Road House Coach is always in attendance at  
the Steamers to convey passengers and their baggage to  
the House Free of Charge.

The House is open all night.

**P. M. S. CO.**

**PACIFIC MAIL STEAMSHIP COMPANY'S**  
Line to PANAMA, connecting via the Panama Rail-  
road with the steamers of the Atlantic and Pacific  
Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the  
month of September, 1863.

**Sept. 13th, - - - Steamer Orizaba.**

**Sept., 23d, - - - Steamer Golden Age.**

Will leave Folsom Street Wharf, with Passengers and  
Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.  
And connect, via Panama Railroad, at Aspinwall, with  
tranships for New York.  
For Freight or passage, apply to

**A. B. FORBES, Agent.**  
J64 Corner of Sacramento and Leidsdorff sts.



FOUNDRIES & MACHINE SHOPS.

REYNOLDS'

Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

137 of these Invaluable Machines,  
ARE NOW IN USE

In California and Nevada Territory, giving a perfectly  
regular motion and  
Saving 20 to 65 per cent of the Fuel.

Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act  
and least liable to get out of order of any Governor in  
use. It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.

Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney  
or Valve in the Blast Pipe by the pressure of the  
steam in the boiler. It will regulate the pressure ten  
pounds on the square inch. It cannot get out of order  
and any person can put one up in an hour after the damper  
is put in.

Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the  
common ratchet, and when small holes are wanted, it  
can be done four times as fast. The handle can be worked  
in any direction.

Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.

Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.

Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury  
to the iron. In use for the past EIGHT years.

Refer to—Sugar Refinery, San Francisco,  
Cottrell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.

E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

MOYNIHAN & AITKEN,

Boiler Makers and Blacksmiths,

Mission, between Beal & Fremont Sts.,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed  
at the shortest notice, and on the most reasonable  
terms. Jy 29

PUMPS!

HARRISON'S

California Lift and Force Pump,

WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire Engines, Wrecking or Irrigat-  
ing. This is the Cheapest, Lightest and most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

ALL SIZES;

Capable of throwing from ONE HUNDRED to FIVE  
THOUSAND Gallons per Minute—For sale by

C. H. HARRISON,

PHOENIX OIL WORKS,

1e-15 517 Front Street, San Francisco.

60 lbs. MARINE and

Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL  
Works in this city, for Hulls and Decks of Vessels  
on ground. Mineral Rock contains Arsenic, Copper, Li-  
tharge and six other Minerals. When used on the Decks  
Bottoms of Ships, it is equal to a coat of Stone, and  
is equal to Copper, no worms will over effect it, and  
cheaper than any other paint.

DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur,  
two parts Mineral Paint, mix with Coal Tar and apply  
hot.

For sale by all Ship Chandlers and Tradesmen, in boxes  
50 lbs. each, or by the Pacific Metallurgical Works.

25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal  
covering them with a coat of Stone, being perfectly  
Fire Proof, and costing less than any paint.

DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part  
lute lead, thin with Linseed oil: if a lighter color is  
wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white  
lead, mix with Linseed oil. Put it thick on a tin Roof  
one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,  
G. T. Fouque, Superintendent.

WORKS, North Beach; Office, 509 Sac-  
ramento st., San Francisco.

FOUNDRIES & MACHINE SHOPS.

PALMER, HANSCOM & CO.,

GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco.

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST  
complete amalgamation of the precious metals of  
any process now known.

By its steam is introduced in the most effective and eco-  
nomical manner, while it is peculiarly adapted to the  
catching of floating gold and silver, known to be other-  
wise lost. Made exclusively by

PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

JOHN P. GALLAGHER.....JOSEPH H. WEED.

GALLAGHER & WEED,

BRASS & BELL FOUNDRY

AND

LOCK FACTORY.

No. 125 First Street, opposite Minna, next door to Pacific  
Foundry, all kinds of

Brass and Composition Castings and  
Finishing, done with neatness and  
dispatch.

CHURCH AND STEAMBOAT BELLS, OF ALL SIZES

Made to order. Engineers' Gongs made and hung in  
the best manner. Bank, Vault, Store and Prison  
Locks, also brass Padlocks and Shop Locks of various  
patterns, on hand and made to order.

Particular attention given to casting Rudder  
Braces and Ship Work in general.

All Jobs promptly attended to.—Prices  
moderate.

Removed from Oregon street, between Front and Davis.

Miners' Foundry

—AND—

MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHI-  
nery, the Best and Most Economical, manufactured  
in the State of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgama-  
tors and Water Wheels—some in operation and on exhibi-  
tion.

Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.

All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING

San Francisco, February 23, 1863.

San Francisco Machine

.....AND.....

IRON WORKS!

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON  
most reasonable terms.

Steam Engines, High and Low Pressure; Quartz  
mills, Saw mills, Mining Pumps, Hoisting machines for  
mining purposes, Wine Presses, Agricultural implements  
etc, etc, and Castings of all descriptions made to order.

Steam Engines exchanged and for sale by

DEVORE, DINSMORE & CO.

REPAIRING promptly attended to.

FOR SALE.

San Francisco, July, 1863. Jy13

FOUNDRIES & MACHINE SHOPS.

VULCAN IRON WORKS COMPANY

P. Torquet, Manager.

STEAM ENGINE BUILDERS

and

BOILER MAKERS,

Iron Founders and General Engineers,

No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing  
Machinery.

Shoes and Dies of the hardest iron,  
Russia Iron Punched Screens.

Steamboat Machinery: Saw, Flour and Sugar Mills.

High and Low Pressure Boilers of all Styles.

JENVAL and other Turbine Water Wheels with latest  
improvements.

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABMET METAL CASTINGS, FIRE ENGINES, FORCE  
and Lift Pumps, Church and Steamboat Bells, Tavern  
and Band Bells and Gongs, Hose and all other joints,  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PIPES and NOZZLES for MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.;  
COUPLING JOINTS of all sizes. Manufacturers of "Gar-  
ratt's Patent Improved Journal Metal."

D. MORRIS,  
MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of  
Repairing done at moderate prices. Jc13

LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON  
WORKS.

The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.

Old Stand, corner Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

THEODOR KALLENBERG

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical  
Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and Die Sinking, Embossing Stamps.

Repairing of Machinery promptly attended to.

No. 413 Market street, San Francisco.

d7.3m) San Francisco.

HIRAM WRIGHT,

PICK MAKER,

Has established a Manufactory for the Making of  
MINER'S PICKS,

at

NO 121 BUSH STREET, SAN FRANCISCO,

[Between Sansome and Battery.]

Where can be had a superior Pick for Miners use  
As he manufactures all his picks under his own personal  
supervision, he warrants them as being made of the  
best material and by the best workmanship.

Orders attended to and filled promptly and with dis-  
patch. aug17

WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established him-  
self in San Francisco, for the manufacture of every  
description of PICKS of the best material, at reduced  
prices. Pick Eyes of the best iron furnished in any quan-  
tity, at low rates. Orders from the country promptly  
attended to. N. B.—None genuine unless stamped with  
my name. JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco.

CALIFORNIA TOOL WORKS!

John Weichhart,

Manufacturer of

•All Kinds of Edge Tools, Etc.,

Plane Irons

Moulding Irons,

Stone Cutter's Tools, etc

No. 22 Fremont street, bet Market and Mission,  
San Francisco, July 14, 1863. Jy 20

A NEW PAPER MILL is to be erected by  
the side of the one already in operation on  
the San Lorenzo River, which is to furnish  
printing paper. The one now in operation  
manufactures wrapping paper only, and is  
said to be a very profitable investment.

The POWDER MILL, in the same locality,  
will soon be in operation. Most of the ma-  
chinery is already on the ground.

It is estimated, says the Pajaro Times of  
the 19th inst., that, within the last year, there  
has been invested, by Santa Cruz and San  
Francisco capitalists, in manufacturing en-  
terprises, on the San Lorenzo River, at least  
five hundred thousand dollars. These in-  
vestments are returning fortunes. It is said  
that John Sime, of San Francisco, has about  
one hundred thousand dollars in the Powder  
and Paper Mills.

THE OPPOSITION STEAMER, Moses Taylor,  
will sail promptly as per advertisement in  
another column. The announcement that  
she would be hauled off and placed tempo-  
rarily in the Mexican trade was without any  
foundation whatever.

The discovery of extensive lead mines in  
Missouri is now an established fact. In  
Franklin and Washington counties the de-  
posits are very rich, and working-men are al-  
ready earning twenty-five dollars per day in  
its extraction. Large bodies of the land can  
be bought for from five to ten dollars per  
acre, and it is estimated that one acre will  
yield four thousand dollars worth of lead.

Eye, Ear and Throat.

DR. DE CASTRO,

Oculist and Aurist,

WHO HAS PRACTISED IN NEW  
York and all the principal cities of Europe with  
such unrivalled success, and from each place is in pos-  
session of the most eloquent testimonials, many now con-  
sulted upon diseases of these delicate organs, with a view  
to their permanent cure. Deafness of long standing thor-  
oughly cured. The Doctor employs his (by the Medical  
Society of London approved)

Self-adjusting Artificial Tympanum,

For the relief of deafness, attended by loss or injury of  
the membrana tympani, and for the cure of discharge  
from the ear—the inventor—Dr. De Castro, M. D., author  
of "Deafness Practically Illustrated as to its Nature and  
Treatment," etc.

The self-adjusting Artificial Tympanum was first intro-  
duced to the notice of the profession at the meeting of the  
Medical Society of London, on the 20th of November,  
1863. An animated discussion ensued on the reading of  
the paper, and several members of the Society bore testi-  
mony to the success of the remedy and the importance of  
the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-  
Adjusting Artificial Tympanum, as he had observed the  
immense benefit a young lady friend of his had received  
from it. She was in fact, quite deaf, and in a most mis-  
erable state: the effect of the tympanum was instantaneous—  
quite like a miracle. Five members of the Medical Society  
from the corner of Kearney and Market Streets, New York, and the principal  
cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and  
Kearny streets. Entrance on Market street.

39. Mr. Editor—Having been afflicted  
with deafness for the last two years, originating from a  
severe cold, and for the last month suffering from the  
most excruciating pains in my ear, I was obliged to come  
down to San Francisco to seek relief. After a physician's  
recommendation to wait on Dr. De Castro, on the corner of  
Kearny and Market streets, and underwent one operation,  
and it is with the utmost pleasure I can say my hearing  
was suddenly and without pain entirely restored. I deem  
it my duty to make this known to the public, and to re-  
commend Dr. De Castro's skill as an aurist.

JOHN REESE, Napa Valley.

James Callaghan, witness.

San Francisco, July 30th, 1863.

[From the Daily Alta.]

San Francisco, June 30th., 1863.

ED'S DAILY ALTA:  
Permit me through your widely circulated journal, to  
say, that my daughter Mary Ellen, has been afflicted with  
deafness since she was thirteen months old, and that she  
has been a member of the Deaf and Dumb Institute since  
it was organized. On taking her to Dr. De Castro, on the  
corner of Kearney and Market Streets, and undergoing un-  
der his direction, two operations, she has heard sounds  
very distinctly; and is now, I am happy to state in a fair  
way to get permanent relief. The result, thus far, is sat-  
isfactory; and I deem this notice due to Dr. De Castro for  
his skill; and I would recommend all parties similarly af-  
flicted to give him a trial. My daughter has at different  
times been under the care of the most skillful physicians  
and aurists in California, but up to the period of visiting  
Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT,

812 Green Street.



## MINING NOTICES.

**Wide West Copper Mining Company, Office 528 Montgomery Street, San Francisco, September 10, 1863.**—Notice is hereby given that an assessment of Twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, and payable immediately, in U. S. Gold Coin, to the Secretary, at the office of the Company, or to J. M. Pike, Superintendent, at Copperopolis.

By order of the Board of Trustees,  
sep14 M. G. ELMORE, Secretary.

**Bald Eagle Gold Mining Company, Gold Flat District, Nevada County, Cal.**—Notice is hereby given that a 21 assessment of Twenty-five cents per share has this day, (September 9th, 1863,) been levied by the Board of Trustees on the Assessable Stock of the above named company, and payable immediately in United States Gold Coin to the Secretary at his office, or to T. S. Smith, Superintendent, Grass Valley, Nevada Co. By order of the Trustees,  
T. L. BIBBINS, Secretary, 105 Montgomery Street.  
sep13lm

**Winona Gold and Silver Mining Company.**—The first annual meeting of the stockholders of the Winona Gold and Silver Mining Company, will be held at the Company's office, No. 428 Montgomery street, for the election of five Trustees for the ensuing year, on the 19th day of September, 1863, at 7½ P. M. By order of the Board of Trustees,  
M. G. ELMORE, Sec'y.  
aug24

**Red Jacket Mining Company.**—At a meeting of the Board of Trustees of the above company held July 7, 1863, the first assessment of Five Cents per share on the capital stock was levied, payable immediately in United States gold coin, to the Secretary, office 420 Montgomery street, Room No. 2. By order of the Board.  
J. W. CROSLY, Secretary.  
aug24

**Notice is hereby given that an Assessment of ten (10) cents per share on each and every share of the Capital Stock of the Buena Vista Gold & Silver Mining Company—Fort Pitt Ledge, Prince Royal District, Humboldt County, Nevada Territory—was this day levied, payable immediately in U. S. gold coin, to the Secretary at No 413 Montgomery street, San Francisco.**

By order of the Board of Trustees  
H. B. MINOTT, Secretary.  
September 22, 1863. sep28

## Mining Shares For Sale

BY  
C. H. CRANE,

Office 28 Government Block.

475 Shares U. S. Mining Company, Virginia City.  
910 Shares Granada Gold and Silver Mining Company Virginia Hill, Virginia City.  
108 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.  
20 Shares Mohave Mining Company, La Paz District, Colarado, N. M.  
30 Shares Aspenwall Gold and Silver Mining Company, Devil's Gate District, N. T.  
75 Shares Washington Copper Mining Company, Indian Bar, Tuolumne Co.  
228 Shares Montgomery Gold and Silver Mining Company, Inyo District, Tulare Co.  
90 Shares Owen's County Consolidated Gold and Silver Mining Company, Inyo District, Tulare Co.  
50 Shares Corwin Point Raynne Gold and Silver Mining Company, Virginia District, N. T.  
10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California.  
sep28

JOHN ARMSTRONG.

WM. P. WILDER.

## ARMSTONG &amp; WILDER,

VIRGINIA CITY, N. T.,

SEARCHERS OF RECORDS  
for Mining Claims & Real Estate.

RELIABLE ABSTRACTS  
guaranteed at reasonable prices.  
LETTER OF ENQUIRY  
promptly answered.  
sep28

**Utica Gold & Silver Mining Company,**  
Office, 528 Montgomery Street, San Francisco, Sept. 18, 1863.

Notice is hereby given, that in accordance with the laws of the State of California, and the resolutions adopted by the Board of Trustees of the Utica Gold and Silver Mining Company, Esmeralda District, there will be sold at Public Auction, at the Office of the Company of Friday October 28, 1863, at 10 o'clock A. M., so many delinquent Shares of the Capital Stock of the Utica Gold & Silver Mining Company, standing in the names of the following named persons, as will be necessary for the payment of the assessment of ten cents per share, levied June 12, 1863, together with cost of advertisements and expense of sale, unless said assessments with accruing charges are previously paid:

Names.	Certificates.	Shares.	Amount.
L. B. Lott, No.	7,	20,	42.00.
G. I. Church, "	11,	20,	42.00.
G. H. Gray, "	19, 25,	40,	84.00.
J. F. Gilbert, "	27, 31, 34,	180,	360.00.
F. A. Baker, "	29, 32, 35,		
	30, 33, 36,		
	37, 40, 43,		
	38, 41, 44,	180,	378.00.
	39, 42, 45,		
G. L. Church, "	47, 53, 54, 55, 56,	35,	72.00.
Geo. Morrow, "	62, 63,	15,	30.00.
J. Meyer, "	68,	5,	10.00.
J. Kamsler, "	69,	5,	10.00.

G. L. WALRATH, Secretary.  
San Francisco, Sept. 18, 1863. 1m

## MINING CARDS.

## OWEN'S RIVER CANAL COMPANY.

Capital Stock.....\$1,000,000.

10,000 Shares.....\$100 per Share.

A Portion of this Stock is no offered to the public, and recommended as an investment.  
FULL PAID AND UNASSESSABLE

Stock, also Assessable Stock, can be obtained of A. J. DOWNER & CO., the authorized Agents of the Company,  
406 Montgomery street.

President.....R. S. WHIGHAM.  
Secretary.....W. FISK HICHOCK.  
Treasurer.....MONTGOMERY GODLEY.  
Superintendent.....WILLIAM FLEMING.  
Engineer.....J. E. CLAYTON.

TRUSTEES:  
R. S. WHIGHAM, formerly of Whigham's Mill, Nevada City.  
WILLIAM FLEMING.....of San Francisco.  
SPEER RIDDEL.....Paying Teller of Parrott & Co's.  
ISAAC SWAIN.....of A. J. Downer & Co.  
WILLIAM P. PRATT.....of Nash & Fogg.  
Office of Company 328 Montgomery street  
28sep

ALEXANDER STOTT,  
MINING SECRETARY,

512 Sansome Street, San Francisco.

Secretary of—

HORSE SHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

## T. C. Sanborn &amp; Co.

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

## OPHIR SILVER MINING STOCK,

GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

J. F. MILLER.

W. C. COLEY.

## MILLER &amp; COLEY,

Stock Brokers &amp; Mining Agents

327 MONTGOMERY STREET,

Between California and Pine, in Jerome Rice & Co's Real Estate Sales Rooms, San Francisco.

ALL KINDS OF STOCK AND MINING  
Business attended to with Promptness  
and Dispatch  
aug17

## L. F. LELAND,

## STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY  
PEASE, BOWLEY & CO.,  
Real Estate, Stock and Exchange  
BROKERS,  
621 Montgomery street, San Francisco.

LEGAL TENDER NOTES AND MINING STOCKS,  
BOUGHT & SOLD.  
je-29

## AGENCY

For the Purchase and Sale of

## MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.  
je13 Wm. FAULKNER.

## New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

MORCAN, STONE & Co  
je-29 108 Front Street, San Francisco.

## BUSINESS CARDS.

## Napoleon Copper Mining Company.

Capital Stock.....\$1,620,000.

2,700 Shares—\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACCRELLISH  
Secretary.....R. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....A. W. HASKELL

## TRUSTEES.

F. MACCRELLISH, of Alta California  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je29

THE EUROPEAN  
ORE REFINING  
COMPANY.

Quartz Mill and Furnaces, Bryant Street,  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF

## ORES AND MINERALS.

In large or small quantities, for such Experienced Treatment by the

LATES EUROPEAN METHODS,

As may be ascertained by

## CAREFUL ANALYSIS,

At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.  
39 The South Park, and Folsom and Kearny street Cars pass Bryant street.  
aug1

## The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF

COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,

LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,

je1-14 Montgomery Street, San Francisco.

## MARTIN &amp; Co.,

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

## Purchase of Copper Ores;

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN

AND NICKEL.

Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,

New York. San Francisco.

San Francisco Post Office, Box 1259.

je 1.

San Antonio Gold and Silver Mines,  
LOWER CALIFORNIA,

## FORWARDING &amp; MINING AGENCY.

SAMUEL SMITH,

OFFICE—North West Corner of Front and Clay Streets, San Francisco.

MINING MACHINERY AND MERCHANDISE FORWARDED, Mining Claims secured, through the resident Agent at San Antonio, and information furnished regarding any claim, in that Territory, on Commission.  
je-26

H. C. KIBBE,  
MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

## BUSINESS CARDS.

## SOUTH PARK

## Quartz Mill and Reduction Works

GOLD AND SILVER ORES WORKED AT REASONABLE RATES, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO,  
Office in Shiel's Block, opposite Masonic Temple.  
je13 S. F. CLOUSER, Secretary.

## W. W. HANSCOM,

Steam and Mechanical Engineer,

Designs furnished, and Drawings made for

Engines, Mills, Water Wheels, Mining Machinery, etc., etc.,

At Golden State Iron Works,

aug x First Street, San Francisco.

## TO MINING COMPANIES!

Offices To Let.

SUITES OR SINGLE ROOMS,

in Government Block,

N. W. Cor. of Sansome and Washington sts.

au-24

El Paso District, Los Angeles County,

## MINING AGENCY

C. W. TAPPAN, GENERAL AGENT

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mine for a reasonable consideration.

LETTERS OF EXCHARGE, containing Revenue or Postage

Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to.

The subscriber has a carefully prepared map, (an

specimen,) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to J. Barnett, Esq., 425 Davis St., San Francisco Cal.

El Paso, June 21, 1863. C. W. TAPPAN.

au1

## MINING &amp; SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND

SCIENTIFIC PAPER ON THIS

CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES.

A new volume of this extensively circulated paper

commenced Sept. 11, 1862. It is intended that every

number shall be replete with information, concerning

Mining, Scientific, Mechanical and Industrial pursuits,

together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purpose, together

with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper published.

The Mining Interest!

Will find it of great value, as it will contain all the

news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to the

purpose, and of everything generally that may be of service to the Miner.

The Inventor!

Will find it an excellent medium for the purpose of

bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and

also of receiving any information that may be necessary in obtaining his patent, the proprietors having his great experience as Patent Agents, together with facilities at Washington that enable them to obtain Patents with dispatch.

The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its columns will from time to time contain original engravings of new machines and inventions, together with

large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

To Chemists, Architects and Millwrights

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers:—Four Dollars per annum

## Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Names can be sent in at different times and for different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER &amp; SMITH, Publishers.

Room 57, Government House, Corner of Washington and Sansome streets, San Francisco.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, OCTOBER 5, 1863 NO. 49.

## REMOVAL.

The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing more room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.

## TEMPERING STEEL.

The state of combinations between iron and carbon, which appears to be essential to form steel of the best quality, is, as is well known, destroyed by heat, so far as to entirely impair its most important qualities. In tempering steel, the effect produced by plunging the heated metal into cold water, is a sudden contraction of its bulk. The particles of steel are suddenly driven together, as if by concussion, presenting a very close analogy to the effect produced by hammering. It is the character of this concussion that determines the combinations of iron and carbon which results in the formation of steel. The heating of the metal not only expands it, but also gives to its particles a certain mobility, which enables them so to manage themselves, that by the sudden concussion which takes place in cooling, the peculiar combination necessary to the formation of steel is affected.

If a bar of iron is heated to a bright red heat, and hammered on an anvil, covered with finely-powdered charcoal, until it has cooled down to a dull red heat, and then plunged into cold water, it will be converted into steel at the surface. A bar of iron heated to a bright red and cooled to a dull red in powdered charcoal, without being hammered, will not present any signs of steel, when plunged into cold water like the bar previously hammered.

Take untempered steel and dissolve it in acid and there remains a black substance, resembling graphite, which is insoluble. When tempered steel is thus dissolved the insoluble residue is not more than one eighth that of the untempered. It appears, therefore, that tempering produces a true chemical change in steel. Steel formed by hammering, leaves a much larger percentage of insoluble residue than that formed by tempering in the usual way.

Hence it is inferred that the combination produced by hammering is not so complete as that produced by tempering, because it produces a concussion of the particles of steel in one direction only—in the direction of the blow—while the sudden cooling by water causes a concussion of the particles in every direction at the same instant.

In tempering, the more sudden the cooling, the greater is the force by which the particles are driven together, and the hardness and other characteristics communicated to steel in tempering, are in an increased proportion to the time of cooling.

[From our Special Correspondent.]

EDITOR OF THE MINING AND SCIENTIFIC PRESS:—It will be unnecessary, I suppose, to give an account of my trip to Stockton per steamer, for beyond the clear, soft blue sky, brilliant moon, and balmy nights of California's summer season, it possessed no unusual interest. It would be improper, however, to omit an acknowledgement of the usual courtesies, which the Steam Co. extend to the Press upon these occasions, and we beg to return our thanks for the attentions so liberally bestowed upon us.

## THE FAIR.

The first day of the Fair, never amounts to much anywhere, being chiefly confined to a suitable arrangement of articles for exhibition in the pavilion, and to racing. With reference to the latter, the people of this district may be satisfied; for, I understand the horses, running and trotting, made better time, than any previous year. Dr. Holden, with cordial politeness, presented myself and friend Bromall, with complimentary tickets, bidding us use them well and freely, wherever we desired to go, and for whatever we wished to see. The stock exhibition, the races, and military reviews, I could not visit, being prevented by attention to my special mission. They were all admirable, however, and passed off brilliantly, with one exception, when by the use of an old gun, totally unfit for service, a soldier had his arm blown away, a little below the elbow. His recovery is doubtful.

## THE MINING DEPARTMENT.

In conformity with my instructions, I paid particular attention to the "Mining and Mechanical Departments;" but dotted down some general observations, of such articles of local produce and manufacture, as I thought possessed sufficient importance to be generally interesting. In neither of the first cases was the exhibition large, although good. Fine samples of ore were on exhibition from various mining localities. Two large blocks of Copper ore were especially noticeable, from the Napoleon and Keystone leads; but as I shall have to speak of these wonderful mines when I get to Copperopolis. I shall say no more at present, than that their samples for size and quality were magnificent. There were splendid samples from distant mines, Washoe, Reese River, and New Mexico, of silver and copper, which I pass over, as not coming legitimately under observation. The Great Republic and Hall claims, Monte Diablo, had good specimens present, calculated to raise the copper interest of that section. Lalla Kedolka, or some such name, Toulumne county, had good samples. The Colton claim, Hawkeye district, Calaveras county, very good. Gopher district, same county, the same. Copper Hill Company and Lone Star, both copper, located at Campo Seco, had very superior samples. The Antelope Company, Calaveras county, silver, had a splendid piece of rock. The Dead Set, Col. Warren, Beach How and Confidence leads, were simply marked Mariposa; their sample were good in general. The Circle of Light claim, exhibited croppings of silver ores from Plata Verdi, the best I have seen in the State; while the Chancellor Pettigrew, the only gold specimen I saw on the table, Sonora, Toulumne county, bordered upon the magnificent. There were other ones of greater and less value exhibited, from different coun-

ties, which I have no time nor space to notice; and in concluding this portion of my letter, I would observe, that many of the labels were incomprehensible, a fault very much to be regretted as it causes unnecessary confusion and trouble. Those exhibiting articles of value and general use, should be more explicit in their descriptions.

## THE MECHANICAL DEPARTMENT.

As I have already stated, the Mechanical Department was not large, but the articles were superior, I shall notice only a few of the most prominent. The first was a large and magnificent hearse, by Hoffman and Brendt of this city, made to order for the coroner and valued at \$1,600. It is really a gorgeous piece of manufacture; but whether it will benefit those whom it carries to their last home, I know not. There is nothing of the kind equal to it, however, in the State. In these days when we pay so much attention to the dead, and so little to the sufferings of the living, I suppose it is all right.

Mr. J. Pierce of Stockton, had a magnificent set of drawing-room furniture, that would do credit to the Occidental. Nash & Fogg had a case of gentlemen's boots, worthy the dandies of Paris, London and New York. Webster Bros. had a most ingenious corn-sheller, which will be of great use to this State. The machine I thought most of, for its convenient size and great power, was the Union Plantation Mill, for grinding corn, on Baker and Hamilton's stand, but manufactured in Philadelphia. It makes excellent flour, and needs only the labor of one man; they had also an air-churn which makes butter in three minutes—only think of that. Mr. Miller, of this city, offered two splendid wagons, for single and double spans, which for lightness and strength, were much admired. There were any amount of washing machines, which appeared to attract the ladies; but on listening, I found their opinions varied so much that I prudently abstain saying anything about the particular merits of either. Dr. Debrom of this city, had a most beautiful glass machine, showing the circulation of the blood through the system. It is beautiful, meritorious and instructive.

I am sorry I have not time to notice the many other useful exhibitions present; but I cannot omit saying, that if Stockton does not go much ahead in buildings and improvements, her citizens are alive to their interest, and present articles of home manufacture, which would do credit to any State in the Union. J. D. P. Walker, had two sets of harness: one buggy and one wagon, which in material and workmanship would vie with the celebrated Consend harness.

The other cities of prominence were all represented.—Bowen & Co., of San Francisco, had a magnificent assortment of family groceries of every description. The Messrs. Taylor of Sacramento street, sent up some of their own paper, which is spoken of in the highest terms. A Mr. Jno. Burns, had some horse-shoes, and racing plates which for finish and designs, I never saw surpassed in England. Jacobin, of the Pioneer Distillery, Marysville, had a jar of turpentine, and glass resin, made in their establishment, which all agree, cannot be beaten by any country. Provost of San Jose, had a magnificent display of silk-worms, which were very interesting as they were busy at work spinning. I have long advocated



the cultivation of the mulberry tree, instead of the grape-vine, for a product of value, and a means of industry there is no comparison between the two, so far as the best interest of the State is concerned. There was any amount of California wines exhibited, but I don't think much of that branch of our revenue.

#### FRUIT EXHIBITION.

Although this section of country has been slow in cultivating good fruit, they have succeeded at last. A more magnificent display was never presented to public inspection. Mr. Benson, from Mokelumne river, had ten apples which I measured, and found they averaged 15 inches round. I took the length of a bunch of six carrots, and found them all nearly three feet long. The Mormon Slough Garden, gave grapes weighing five pounds and upwards per bunch, while the berry was as large as those of France. There was one bunch, from a Frenchman, more splendid than any I ever saw in France. Squash, beets, cabbages, etc.—were ever such monsters seen? One pear, out of hundreds, of the Dutchess D'Angeloine tribe, weighing 33 ounces—didn't ones teeth feel funny. There was a bag of sweet Lisbon onions, grown by Mr. Murray, which he says are infinitely better than any he ever grew in the richest soil of Ireland. They were really magnificent. Mrs. Dr. Beatman had a sample of home-made raisins, one year old, and others of dried apples, pears, peaches, plums, not to be surpassed in any respect. You must understand, that I have only culled these particular specimens from a host of the highest order, and which I do not mention, simply because I have not time. I can only add, in this connection, that San Joaquin is entering on a bright destiny.

#### FANCY ARTICLES.

The ladies' handi-craft formed a conspicuous feature this year. I could not spend the time I desired in examining its many treasures of tastes and skill. Mrs. So-and-so and Miss Something-else, had so many articles of costly beauty and magnificence, that I concluded it would be too dangerous to mention any particularly. I cannot omit, however, even at the risk of having my head taken off, mentioning a blue dress-coat, with gold embroidery by Mrs. Melender. It certainly, for gorgeousness and accuracy, beats all of the kind I ever saw; not accepting the official coat of His Royal Highness, the late Duke of Sussex, while at the head of the Masonic order in England; for, though not so varied in color, it was equally grand and elaborate in execution. Babies' caps, dresses, bed-covers, and a thousand things, mysterious to us bachelors, laid in profusion before me, and all I think it safe to add, on this branch of industrial skill and energy, is: God bless the little fingers making them; may they never weary in their own duties of life, for it is far better to be thus employed, than manufacturing bloomers and writing politics.

I acknowledge this is but an imperfect description, but copious enough, I trust, to be satisfactory to my old friends in Stockton, who have treated me so kindly on my re-appearance amongst them, and interesting to your numerous readers, whose indulgence I crave on this occasion. The post is closing, and I have to prepare for the ball to-night. The lady I take polkas easily at 2-30, which is fast time, and the thermometer stands somewhere about 90—if I survive you shall hear from me next week. L. HARNETT.

**OIL WELLS.**—A correspondent writing from Titusville, Pa., furnishes the following in reference to the oil regions in that State: Almost as old as the hills surrounding it are the springs which once gave it the name of Oil Creek, and now makes its fame world-wide. There is but one king here, and all are subjects. The head and front, the root and branch, of every species of business, in its legitimate callings—as speculation in its most rampant form—is oil; consequently you see, in close proximity on every side, oil depots, oil refineries, oil derricks, oil tanks, oil shippers, and the everlasting inevitable oil team—at once a nuisance and a necessity, as you may judge when two thousand of them have passed over a given point or bridge, where a market was kept, in one afternoon, cutting up the roads in a frightful manner, and reducing them to such a state that, between mudholes, stones and stumps, you may well suppose that pleasure riders are not the order of the day. For bustling activity and teeming population we resemble Western towns; while dreams of wealth, wilder and more fabulous than the Arabian Nights have been realized in a day. What do you think of "the big well," which flows two thousand barrels a day, bringing its owners an income of two dollars a minute, and supplying

one-third of all the oil sold here. There has been a million of dollars paid by its owners for this well—one small share having been sold for \$15,000. These are only a few facts of the many, of the wealth accruing privately and collectively to individuals. The well owned by Dalvell Brothers, brings them eight hundred dollars per day. The revenue which accrues to the Government, is five millions a year. What has the South to offer equal in resource to our oil wells?

EL PASO CITY, LOS ANGELES CO., }  
Aug. 27, 1863. }

**ED. PRESS:**—It is a very dull time with us; hot weather; but little emigration. I suppose all are waiting to cast their votes before starting out.

I have been at Ophir City for some days past helping the Tappan Company to open their tunnel to the Ohio lead. They are progressing finely. While absent a circumstance of considerable interest has transpired: No less than the advent of a live white woman, the first ever seen in this district, who has accompanied her husband, Mr. Boyd, with a loaded ox team, to Slate Range, on a pleasure trip, I suppose. They passed through our city yesterday, and will probably return in about ten days.

**31st. AT OPHIR CITY.** For three days we have had terrific thunder and lightning storms, accompanied with rains, lasting about an hour or more, breaking through our tents in all directions, and washing everything inside, upon the ground, making our situation very uncomfortable. The sun, however, comes out warm a part of the day, so we shall soon be all right again.

Messrs. Milliken & Warner have just completed a good board house, (the first in Ophir City,) and outsiders have had the privilege of sleeping there while their camp floors were drying.

**SER. 2.** A team just arrived from Los Angeles, with supplies for all hands, and news up to the 25th ult.

I heard that Geo. Merrick, the young man who was wounded by his own pistol, while riding on horseback, has had his leg amputated; was very low, not expected to live. Charles Nesbitt, who was so severely wounded in a tunnel here, Aug. 14, was doing well and able to be out.

**7TH.** The team started back to-day and took 14 more specimens of ore croppings for your cabinet, and some for assay.

But little prospecting is done here now, yet as many as six new and promising leads have been located within ten days.

The work of tunneling is going on without interruption, and in a few weeks we hope to be able to send up some rich ore for reduction.

The Live Oak Gold and Silver Mining Company have just got their deed of trust signed, preparatory to incorporating. And intend going to work on their claims, La Platas 1, 2 and 3, and the America, right away.

The Gila, (pronounced hee-lah,) River excitement has had a tendency to direct the tide of emigration from us to a great extent, and may seriously retard our growth. We hope that the hard working men will come here, as this is far enough from civilization, though only half as far as the new diggings.

**9TH.** In Press, No 39, we notice a reference to a new drilling machine, invented by Mr. J. S. French of Bangor, Maine, and I earnestly wish that something of the kind could be introduced here, where tunneling is the main business of all.

Could you not influence some clever man who has a first-rate article in that line, to send us out one as a sample, by which we can order more if they are successful. I would take all the responsibility required in the arrangement, and our mines would throw some of their feet in the market, at a very low figure, to procure a machine, which would take the place of handwork. C. W. T.

**HOW TO ADMINISTER CASTOR OIL TO CHILDREN.**—The Medical fraternity of Paris recommend the following way of administering castor oil to children:

The quantity of oil prescribed is poured into a small earthen pan, over a moderate fire, an egg broken into it and stirred up so as to form something like what cooks call buttered eggs; when it is done, a little salt or sugar, or a few drops of orange water, or some currant jelly should be added. The sick child will eat it eagerly and never discover the fraud.

A single firm pays one hundred and fifty thousand dollars a year to the London *Limes* for advertising.

#### MATERIAL FOR WINE CASKS.

A correspondent of the *Alta*, furnishes, in substance, the following to that paper:—A question of no little importance to the wine-growers of this State is that of casks to hold the wine. Hitherto pipes used in importing liquors have been employed, but experience has proved them in many ways unsuitable, to say nothing of the fact that the supply will soon become totally insufficient for the demands.

The ordinary material for wine-casks is oak, but the oak of California is too brittle for any such purpose, and new casks, made here of imported oak, cost about 20 cents per gallon. The winegrowers of the State were in a serious difficulty; they thought of sending to Manchuria for stave timber. Fortunately they are now under no necessity of going so far. It has been discovered that the redwood of California will serve the purpose; and for this important discovery the winegrowers are indebted to Col. Harazthy. The redwood is a tree peculiar to the coast of this State;—it is not found in any other part of the world. The tree is, next to the mammoth tree, the largest species of the vegetable kingdom, growing to be 300 feet high and 20 feet in diameter. The wood is straight in grain, and it splits very finely; and it is thus peculiarly fitted for stave timber. But the wine growers were afraid of it because it has a strong red color, and a very astringent juice, as is shown by the black color which it assumes whenever iron touches it in a moist place. Both the color and flavor of wine therefore were in danger from it. Col. Harazthy tried to draw out all soluble color and flavor by steaming, and he succeeded; and the wood was thus rendered fit for wine casks. He steams the staves for sixteen hours. He says that he has proved the fitness of redwood thus prepared by a trial of four years.

**IMPORTANT ALLEGED MEDICAL DISCOVERY.**—Among the latest reports of the principal hospital of Paris, is an account of a discovery of great importance. It appears that a young student enunciated the theory that gangrene or mortification was caused by a deficiency of oxygen in the part affected, and advanced so many plausible reasons in support of his views, that the surgeon in chief to the institution, who happened at the time to have a case of gangrene under his care, determined to give the hypothesis a fair trial. The patient was over seventy years of age, and his foot, in which the disease was making rapid progress, was about to be amputated. The mortified part was enclosed in an apparatus so contrived as to yield a continuous supply of oxygen, and the result was that the gangrene was arrested and the foot saved. The experiment was repeated in the case of another patient equally aged, and with the same success. The inference is that oxygen thus applied, is the specific for a disease which is the scourge of all hospitals for the treatment of surgical cases. Since the present war commenced, probably many hundreds of our soldiers have died of gangrened wounds, and if the application of so simple and agent as oxygen gas will stop the progress of decomposition in living flesh, by all means let the French mode of treatment be adopted in all our military hospitals.

**ANCIENT SYSTEM OF TELEGRAPHING.**—At the Royal Institute, Professor Thomson lately drew attention to an ingenious system of signalling invented by Aeneas Tacticus, 300 B. C., and described by Polybius. Two earthen vessels of the same form and size were filled with water, and provided with a stopcock. One was kept at head-quarters, and a scout carried with him the other. Down the sides of each were placed short sentences, such as "enemy moving off," "enemy coming," "enemy gone," &c. The scout, when he found out what he wanted, keeping himself all the while in sight of head-quarters of his own general, was to wave a flag or a light torch, and simultaneously allow the tap of the vessel with him to be turned to allow the water to run out. The tap of the vessel at head-quarters was also to be turned on. When the water had sunk to the sentence he wished to communicate, the scout would wave his flag or light his torch the second time, and by immediately turning the tap of the vessel in camp, the general would see where the level of the water then was, and correspondingly the sentence affixed, by which contrivance he would receive information some hours before the scout could personally communicate it.

**AN AMERICAN TEA.**—We have heretofore alluded to a shrub which has recently been brought into notice in Pennsylvania as a substitute for tea, of China growth. We find the following additional paragraph in relation to this article:—

An excellent substitute for tea grows in large quantities in Tioga county, Pennsylvania. It is said to resemble Chinese tea so much that merchants buy it to mix with the genuine. In Clinton county, Pennsylvania, the genuine article is claimed to grow in abundance, and the citizens thereabout are jubilant at the prospect of becoming independent of the "pig-tails." One gentleman, who owns a farm on which the herb is indigenous, says that his attention was first called to it by a native Chinese, who declared it to be the genuine China tea-plant. The gentleman uses it on his table, and no one suspects it as not being the imported article.



# ASSAYS!

Promptness and Accuracy Secured  
By the Use of the Most Improved  
Methods of  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,**  
(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. Jy6

**RIEHN, HEMME & CO.,**

**ASSAYERS.**

Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO

Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO

Messrs. F. PARROT & CO., Messrs. ALSOP & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.

Messrs. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
assaying, also in Mineralogy and Chemistry as far as re-  
quired to become a practical Assayer.

**EXCELSIOR IRON WORKS,**

712 Sansome street,

Between Jackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,**

Manufacturers of all kinds of

Architectural and Ornamental Iron Work,  
Bank and Store Vaults, Safes, Doors, Shutters, Bal-  
cony, Area and Cemetery Railings, Gates, Stairs,  
Etc., and all kinds of Blacksmithing and Job-  
bing done with promptness, and at

Reasonable Prices.

Orders from the country promptly attended to.  
Jel3

**WILLIAM BRODIE & CO.,**

**CALIFORNIA FOUNDRY,**

Fremont Street, near Market, San Francisco.

Light and Heavy Castings,

Every Description, Made to Order. Particular atten-  
tion paid to all kinds of House Work, Plumb and Or-  
namental. Jy13

**Giffards Injectors,**

FOR SUPPLYING BOILERS WITH FEED WATER  
without Pumps No Mill or Mining Company  
could be without one of these valuable instruments.  
Send for a Circular.

DAVID STODDART, Agent.

222 Cor. Pine and Front Sts., San Francisco.

**PATRONIZE**

**HOME MANUFACTURIES!!!**

**James Longshore,**

Trunk and Valise Manufacturer,

77 Sansome Street, under Tehama House. Trunks and  
Cases, Wholesale and Retail, Fine Sole Leather Trunks,  
Saddles, and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
Jy6

**New Style of Ladies' Buckle!**

**W. BOHM,**

INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the  
Construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
possesses several very important improvements over any  
other in use.

The invention having been carefully examined at the  
Patent Office, has been adjudged to be a useful improve-  
ment, and Letters Patent have been granted for 17 years.  
It sells all other buckles in

Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine  
the Buckle at the Jewelry Establishment of

DRAYMAN & LEVY,

621 Washington Street, San Francisco.

JOSEPH H. BROTHERS,

607 Montgomery Street, San Francisco.

FLOBERG & CONRAD,

118 I Street, Sacramento.

Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm," will be  
guaranteed as to its Strength and Durability.  
Jy6

**APARTMENTS.**

FINISHED APARTMENTS, WITH OR WITHOUT  
Board, at 1018 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
home will do well to apply. Jy6

# THE

# BRYAN BATTERY.

The vast interest involved in the reduction of ores on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of the  
most effective, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
class of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

ALONE STANDING THE TEST.

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed  
to combine all the improvements which the experience  
of the past has afforded. They have been

EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any place of mining machinery.

BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent, more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1850, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing complete about 6,000 pounds, and  
the Five Stamp about 7,000. The Mortar Bed being  
cast in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico.  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino.

MANUFACTURED ONLY BY

**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

os 125 to 136 First street, and 136 to 144

Fremont street.

I. C. E. KLEPZIG & CO.,

**GUN MAKERS,**

AND

DEALERS IN GUN MATERIALS,

733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.  
Gilding, and also Silver Plating, by E. Ekland. Jc21

WANTED,

**GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,**

By FRONTER A. DEVEROY,

au81 437 Pine street, San Francisco.

**John R. Sims,**



Oregon street, between Washington and Davis and Fron  
and Jackson streets, San Francisco.

Manufacturers of Fire Proof Doors and  
Shutters, Bank Vaults, Grating, Cemetery Rail-  
ings. All orders from the interior Oregon, Washington  
Territory, Vancouver's Island, British Columbia, or any  
place on the Pacific coast, attended to with promptness  
and dispatch.

Mr. Sims Appreciates the Past

liberal patronage of his friends, and trusts that he may  
continue to merit it in the future.

For the Information of Strangers

he would say that he feels confident that his experi-  
ence in his particular calling is surpassed by none on  
this coast, which his superior work, sent to almost ev-  
ery town in this state, Oregon, also Victoria and the Sand-  
wich Islands, and to be seen on some of the best build-  
ings in San Francisco, fully attests. A large assortment  
of second hand shutters for sale at low rates. api3

**LEANDER RANSOM,**  
Civil Engineer

AND

**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL  
LANDS,**

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE, 328 Montgomery streets. oc7-3

**D. NORCROSS,**

Masonic Temple, No. 6, Post Street.

Military Goods of all Descriptions.

Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.

aug 17

**FOR SALE.**

**PATENT PRESSED RUSSIA IRON MINING PANS.**

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frane and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

UNEQUALLED

**MONITOR COOKING STOVE**

Or RANGE,

For Hotels.

To which we call particular attention.

je-29

TAY, BROOKS & BACKUS.

HOME MANUFACTURES.—Mr. J. L. Gibson,  
of Forbestown who some time since com-  
menced the manufacture of resin, etc. in that  
vicinity, has recently shipped to Hucks &  
Lambert, of this city, 14,000 lbs of resin,  
manufactured by him. His still has been run-  
ning about six weeks, and he has made about  
one thousand gallons of turpentine. He also  
manufactures champhene. In the last 26  
days, says the Marysville Appeal, from which  
paper we gather these facts, he has distilled  
1,150 gallons of spirits of turpentine and made  
168 barrels of resin, of 280 pounds to the  
barrel. His still is of 800 gallons capacity,  
and with his present arrangements he can run  
300 gallons of crude turpentine per day, mak-  
ing daily about 50 gallons spirits turpentine,  
and 2,000 pounds resin.

**G. E. MOORE,**

Assayer and Analytical Chemist,

No. 612 Sacramento Street,

HAVING ESTABLISHED a CHEMICAL LABORATORY,  
furnished with every requisite for delicate Analyti-  
cal work, is prepared to execute the Assay and Analysis  
of Ores, Mineral Waters, Guanos, etc., with accuracy  
and dispatch.

REFERENCES:

Prof. J. D. Whitney, State Geologist, San Francisco.  
Alsop & Co., San Francisco.  
Sather & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento. sep14

**PEOPLE'S  
OPPOSITION  
Steamship Line!**

Special Notice.—The Steamers of this  
Line have been withdrawn from the Ni-  
caragua Route until further notice.

GREAT REDUCTION IN RATES!!!

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
J. H. BLETHEN.....COMMANDER

Will be dispatched for PANAMA

From Mission street Wharf.

**SATURDAY, - - - - OCTOBER 3, 1863**

Punctually at 9 o'clock, A. M., on

Connecting at Aspinwall, by the Panama Railroad, with  
the Splendid Steamship

**ILLINOIS - - - - - 2500 Tons.**

The Moses Taylor, since her last trip has undergone  
the most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins enlarged, refitted and  
reupholstered throughout—making her accommodations equal  
to any steamer on the ocean.

For further information or Passage, apply to

I. K. ROBERTS, Agent,

No. 407 Washington Street, San Francisco,

Opposite the Post Office.

**BOOK KEEPING,  
Penmanship**

AND  
**COMMERCIAL CALCULATIONS,**  
Taught by J. S. LUTY

PRACTICAL ACCOUNTANT,

305 Montgomery Street, Corner of Pine.

**TO QUARTZ MINERS.**

All persons interested in Mining Ma-  
chinery are invited to call at Donahue's Foundry and  
examine my improved Amalgamator. It is unquestion-  
ably superior to anything now known for amalgamating  
Silver and Gold. It works 1000 pounds at a time, and  
will amalgamate over three tons a day. By the motion  
of the revolving muller, the pulp is drawn through its  
centro and passes under it, between the grinding sur-  
faces, to the circumference: from whence it passes again  
over the muller to the centre, through the holes and be-  
tween the grinding surface to the circumference as be-  
fore. Thus a constant circulation of the pulp is kept up,  
bringing the particles of ore again and again under the  
muller, and reducing the whole mass to an impalpable  
powder.

No quicksilver lies between the surfaces to be ground,  
but at the circumference and centre of the pan where the  
metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in De-  
cember last, and all persons are again warned against  
purchasing machines made at the Miners' Foundry called  
"Wheeler's Amalgamator," as they are an infringement  
on my patent, and a suit is now pending in the U. S. Cir-  
cuit Court against the makers thereof. My Amalgama-  
tors can be seen running at Donahue's Foundry, where  
all can judge of their operation and the very superior  
style in which they are being manufactured.  
sep21 THOMAS VARNEY.



## VENTILATION OF MINING TUNNELS.

A most important feature of the expense of running tunnels of any great length, in this country has heretofore been absorbed in the supposed necessity for sinking air shafts, every few hundred feet. We have frequently alluded to the bad management, or rather, lack of knowledge of the principles of ventilation in underground operations, both in driving tunnels and in drifting per endicular openings, or shafts. A late number of the Virginia City Union gives the following very good plan recently adopted at the famous Latrobe tunnel, in Virginia City:

When this tunnel had reached a length of only a few hundred feet, it was found necessary to sink an air shaft, and at F street another; at this point the bottom of the shaft was closed up with the exception of a hole about ten inches square, through which passed a wooden box flume of that size, by which the air is conducted into the futher extremity of the tunnel. The draught is so strong, that notwithstanding the tunnel is west of A street, no other shaft has yet become necessary, and it is thought that no more will be required, as it will be but a short time before it connects with the works on the Comstock. A candle held at the mouth of the flume will be instantly extinguished. Throughout the whole of the great distance which this flume supplies with air, the tunnel is cool and pleasant, and a person can breathe with almost as much ease as in the open air. This plan of ventilation was first suggested to the superintendent of this tunnel, we understand, in reading the translation of an old German work on mining.

The Latrobe tunnel is now in about 2,600 feet, and is in daily expectation of reaching the ledge, (Com. tock,) which it will strike at a depth of 465 feet from the surface.

The Santa Fe mine, also in the Virginia City district, is ventilated on a similar principle. A tin tube, some four inches in diameter, is connected with a tall wooden flue standing in and reaching to the surface of an air-shaft, and running back from the bottom of the shaft to the furthest end of the tunnel, where the drifters are employed.

**MEXICAN MINES NEAR GUYNAS.**—A correspondent of the *Bulltin*, writes as follows from Guynas under date of May 20th:

As to mines, the machinery of Los Bronces is nearly up, and will be all in order by August. Guasapares, Judge Hard's place, is now about running. Judge Bott's Alamos will be running in a fortnight. La Prieta—engine up, and will run within three months. San Marcial Silver Mining Company is well on. Cruccitas will probably be in operation in September. In *bonanza* are the following: Bronces, Cabbi, Cotera, Lambona, Cruccitas, Fresnel and some others. The mines of Cercochui (Sangre de Cristo) and the Dios Padre, so persistently alleged to be in *bonanza* [prosperity] by that veracious sheet, the *Alta*—I dare not say of course, for private and weighty reasons—I again assert to be *still in dead work*, without true ores; and I challenge any proof to the contrary.—*Bulltin*.

In Chihuahua, the mine of Le Crun, Pastrana, and those of Robinson, San Pedro—both in Batopilas—are in *bonanza*. Col. Allen's mine in Urique is a second Ophir; the amount of silver extracted daily is only limited by the capacity of the hacienda. The ores are very rich.

**A NEW COD FISHERY.**—It has been known to whalers for some years past that good cod fishing grounds existed on the Pacific coast, some fifteen days sailing from the Russian port of Petropaulovski. The first fruits of these fisheries, so far as we have any knowledge, arrived at this port, a short time since in the brig Timondra, which brought in some 15 tons of the genuine article, equal in quality to the best ever caught on the Atlantic coast.

An extensive fishing ground of this description in the Pacific Ocean must soon become of vast importance not only in an economical point of view, but also as a nursery for seamen. It is chiefly from our fishing grounds that the Government, in its present emergency, has been enabled to obtain the great number of seamen needed to man our rapidly augmenting navy. We need just such a field in this quarter of the globe as a nursery for the future commerce that must grow up in the Pacific Ocean. It will be wisdom and economy for Government to protect and encourage it, by bounties, as heretofore at the East.

THERE are in the United States more men and estates that can be assessed for one million dollars each, than there were, at the close of Revolution, that could be assessed for ten thousand dollar each.

[For the Mining and Scientific Press.]

VIRGINIA CITY, N. T.,  
Oct. 2, 1863.

ED. PRESS.—I should have written last week, according to promise, but business prevented, and I am hardly in writing trim yet, as I wish to obtain undoubted information on every subject that appears in your columns from my pen.

The great excitement here now is Reese River, and to such an extent has the stampede that way increased, that all kinds of business here is almost at a stand still. This and the coming on of cold weather, have rendered Virginia dull for a time. We have fabulous reports of the richness of that country, but I have seen such excitements and heard such reports before, and am not easily led away by them. I believe that "Reese" is a very rich country, but I know that Washoe is; that its mines are now fully developed, that its resources are boundless, and I have no doubt that many of those who are leaving good businesses and comfortable homes for a place where all the known mines are located for miles; with the prospects of a severe winter, scarcity of provisions and lack of shelter, will return to the rich field of Washoe.

The standard mines here are pursuing the even tenor of their way, doing an amount of work and expending sums of money, that must be seen to be believed, while what are termed "outside mines" are working with wonderful energy. Rich indications are being discovered north and south of this place. In a short walk, last week, over the ridge below Gold Hill, where two or three years ago a man who would think of prospecting would have been thought visionary or crazy, I found some fifty deep shafts and tunnels, nearly all provided with heavy hoisting apparatus, worked by horse power, and on several claims large steam engines are being set up. The indications are as good as those in the best mines here, and when one or two of the "lodes" commence turning out rock for the mill, mark my words, there will be an excitement excelling any yet, and shares that now sell for \$5 and \$10 will count high in the hundreds; on the north, although not as fully developed, the prospects are as good; while on either side of this range the rich lodes are being energetically prospected.

So much for a general birds-eye view of Washoe as it appears to a returned Pioneer. In my next I will endeavor to particularize some of the most promising lodes, etc.

## QUILL.

## THE DISCOVERER OF ZINC.

Zinc was first discovered in 1530, by no less a personage than Theophrastus Aureolus Bombastus Paracelsus, the wild fantastic hero of Browning's celebrated dramatic poem. It will, perhaps, be new to most people to be informed that the very word "bombast" took its original meaning in the "great and swelling words of vanity" uttered by this singular genius. He it was who gave the deathblow to alchemy, and was first to show the utter hollowness of the then prevailing scholasticism, as respected physical investigations. Being appointed to the first professorship of chemistry, at Bale, in 1529—the earliest chair of chemistry ever established—he played such mad pranks, and kept up such a storm in poor little Bale, that the magistrate had to banish him from his chair. After undergoing many alterations of fortune, it irks us to say that poor Bombastus, to parody a modern phrase, "went to the zinc," and died miserably, in an obscure tavern in Salisbury, in the 48th year of his age.

JAPAN, just at the present time, is engrossing much of the world's attention. They are a people far superior to the Chinese in point of intelligence and will be likely to prove very stubborn in their disinclination to come up to the present ideas of civilization and progress, and open their ports, at the demand of the nations, to the commerce of the world. They are far less vulnerable than the Chinese, from the fact that all their important cities are in the interior. They have undoubtedly profited largely by the recent limited intercourse with foreign nations in supplying themselves with materials and skill in all matters pertaining to war. Destiny, however, is against them, and their proud Damios must bow to the fiat of civilization and progress. Our late naval visitor the Wyoming has most nobly opened the ball. Bye-and-bye we shall see what we shall see.

Everything is cheap in Japan. A first class house can be purchased for \$30. Servants work for 50 cents a month. For the use of a horse and groom one week, with food for horse and groom, \$1.50. A person can live comfortably in Japan for two cents a day, or fourteen cents a week.

## VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, Oct. 1, 1863.

Virginia Mining District.		Sierra Nevada.	
	Bid. Ask'd		Bid. Ask'd
Ashland.....	\$ 9 8	Sacramento.....	\$ 90 10
Allen.....	40 50	Shamrock.....	— 10
Atchison.....	— 50	Texas.....	— 5
Alturas.....	3 6	Union.....	— 2 1/2
Belvidere.....	25 30	U. S. Tunnel.....	— —
Birdsall.....	20 22 1/2	Utah.....	— 100
Butcher and Golden Lode.....	20	Old Virginia.....	250 —
Burnside.....	12 30	Washington.....	3 5
Burling Moscow.....	10 150	York.....	3 5
Beach Paxton.....	75 175	Zouave.....	12 20
Bloomington.....	2 3 1/2	Gold Hill District.	
Cassius (Buchanan).....	250 —	Alpha.....	1200 —
Cedar Hill Tunnel.....	— 7	Battle.....	35 40
Cole.....	8 14	Bullion.....	55 —
Commercial.....	15 20	Belcher.....	1175 1300
Consolidated Cedar Hill.....	— 2	Branch Mint.....	14 20
Durango.....	3 5	Caledonia.....	40 45
Empire.....	12 —	Coppers.....	— 35
El Dorado.....	72 100	Eureka.....	15 40
Fairview.....	200 225	Forde & Ricard.....	6 10
Grass Valley.....	75 82 1/2	Gold Hill, Big Ledge.....	75 85
Hazel Green.....	20 25	Golden Gate.....	— 10
Harrison, Virginia favorer.....	22 25	Golden Eagle (No. 1).....	5 10
Harrison, San Fran. Inco.....	2 5	Hawkeye.....	50 —
Irving.....	16 —	Hudson.....	200 250
Insurance.....	12 —	Koh-i-noor.....	— —
Iowa.....	250 —	Leon.....	80 100
Ironides.....	5 6	Laboring.....	3 7
Indus.....	10 12	Lacuerne.....	— 27
Juniper.....	5 10	Mary Ann.....	50 —
Keweenaw.....	25 25	North American.....	60 —
Kenosha.....	9 12	North Ophir.....	10 —
La Crosse.....	9 12	Overman.....	382 1/2 450
Lancer.....	— 7	Oriental.....	5 —
Monte Cristo.....	6 12	Omega.....	— 500
Mereith.....	45 50	Princess.....	— 85
Mr. Davidson.....	— 5	Sinaloa.....	— 5
Mexican.....	10 12	Sweeney.....	— —
McBee.....	25 —	Stephenson-Kelley.....	— 12
Milton.....	— 100	Union.....	25 35
Monarch.....	— 12	Yellow Jacket.....	1200 1300
Madison.....	15 20	Uncle Sam.....	— 120
Mohegan.....	15 —	Yolo.....	— 15
Norfolk.....	2 20	Devil's Gate District.	
Oakland.....	10 —	Governor Nye.....	5 15
Oriental.....	3 1/2 8	Hawley.....	20 45
Oscoda.....	8 12	Monterey.....	7 —
Pride of Washoe.....	8 12	Pride of the West.....	— 55
Peyton.....	15 25	Winnemucca.....	6 —
Poorman.....	150 —	Wide West.....	— 60
Perseverance.....	— 25	Flowery District.	
Rogers.....	— 100	Atwill.....	— —
Recorder.....	8 10	Atchison.....	— 3
Santa Rita.....	15 50	Lady Bryan.....	7 8
Santa Fe.....	35 50	Harrison.....	5 6
Saturn.....	5 20	Uncle Sam.....	— 5
St. George.....	10 20		

**TIN-LINED LEAD-PIPES.**—It has been frequently proposed to line lead-pipes and cisterns with tin, in order to prevent the oxidation of the lead and the contamination of the water. This proposal has recently received an emphatic rebuke from the Liverpool Chemist's Association at one of their meetings, at which specimens of lead-pipe and sheet-lead electro-plated with tin, were exhibited, and some discussion ensued respecting the use of lead coated in this manner for water-cisterns and pipes. It appeared to be the opinion of the meeting that the coating of tin, instead of preserving the lead, was far more likely to ensure its more rapid corrosion, for, if the coating of tin by any means happened to be scratched off, even to the slightest extent, galvanic action would take place, and the lead would be destroyed very quickly. Mr. Nevins and Dr. Edwards stated that their experiments had proved that such would undoubtedly be the case; Dr. Edwards remarking, that in one case which he had examined a cistern made of lead, in which was an accidental admixture of tin, was eaten out by well-water in six months, the lead being rapidly precipitated in the form of sulphate.

**THE SHIPPING INTEREST.**—In our late exchanges some remarkable facts are given touching the maritime interest of the country. An Eastern paper states that during the first half of 1860, the number of vessels clearing from the port of New York in foreign trade was 1,795, of which 123 were American and 662 were foreign, showing a difference of nearly 100 per cent. in favor of American vessels. Comparing this statement with that of the present year, an astonishing change is apparent; the whole number of vessels clearing foreign ports was 2,167, of which only 747 were American and 1,450 were foreign. The interest of American owners are suffering in all parts of the world, and large transfers of tonnage have been made to foreign owners and protection of foreign flags.

San Francisco forms no exception to the general rule, there are to-day more foreign flags displayed by shipping in the harbor than at any previous time. Among the foreign shipping now here are vessels belonging to Prussia, Denmark, Hamburg, Bremen, Lubec, Russia, Great Britain, Sardinia, and Columbia. The high rate of insurance charged on account of the ravages of the rebel steamers *Alabama*, *Florida*, etc., has to a great extent driven American vessels out of our service for long foreign voyages, and the consequence vessels of other nations are doing the carrying trade.



## SALES FOR THE WEEK ENDING OCT. 3, 1863.

Ophir.....	284 Shares	\$2025 @ \$2225	per foot
Falls of Clyde.....	32	3	"
Great Western Tun.....	"	"	"
Josephine.....	"	"	"
Coso.....	"	"	"
Gould & Curry.....	8	4750 @ 4900	"
Savage.....	6	2800 @ 3000	"
Chollar.....	120	850 @ 900	"
Pride of Washoe.....	"	"	"
Bullion.....	"	"	"
Esmeralda.....	"	"	"
Melones.....	76	75 @ 100	"
Laurel Hill.....	"	"	"
Willow Consol.....	"	"	"
Branch Mint.....	"	"	"
Die Vernon.....	85	29 @ 30	"
United Cosmopol.....	"	"	"
Union, G. H.....	15	42 1/2 @ 45	"
Union, R. D.....	248	1 1/2 @ 2 1/2	"
Rhode's Diggins.....	"	"	"
Hale & Norcross.....	"	"	"
Uncle Sam.....	"	"	"
Echo.....	"	"	"
Baltic.....	61	35 @ 40	"
El Dorado.....	123	65 @ 92 1/2	"
North Potosi.....	65	50 @ 55	"
Caledonia Tun. Co.....	288	27 1/2 @ 37 1/2	"
Independent, G. H.....	"	"	"
Silver Hill.....	"	"	"
Garibaldi.....	"	"	"
Bodie Bluff.....	"	"	"
Willow Springs.....	50	5	"
Sheba.....	10	90	"
De Soto.....	"	"	"
Monte Christo.....	"	"	"
Birdsall.....	"	"	"
Rob Black.....	"	"	"
Techattucup.....	"	"	"
Napoleon.....	"	"	"
Fellowes.....	"	"	"
Potosi.....	20	10 12 @ 1250	"
Yellow Jacket.....	18	1000 @ 1025	"
Imperial.....	"	"	"
Overman.....	20	460 @ 475	"
Beat & Belcher.....	4	825	"
Sierra Nevada.....	23	90 @ 100	"
Daney.....	120	90 @ 105	"
Burning Moscow.....	888	125 @ 200	"
Charles Caney.....	70	15 @ 17	"
Baltimore American.....	20	30 @ 35	"
North American.....	60	60 @ 65	"
Bullion (G. H.).....	"	"	"
Pride of the West.....	233	22 @ 60	"
Spanish No 2.....	30	35 @ 43	"
Norton.....	233	4 1/2 @ 8 1/2	"
Bu nside.....	25	8 1/2	"
Adriatic.....	"	"	"
Iowa.....	"	"	"
Maulson.....	"	"	"
Buckeye.....	365	14 1/2 @ 26	"
Lucerne.....	10	24	"
Lady Byron.....	10	10	"
Mt. Davidson.....	"	"	"
Cedar Hill Tunnel.....	"	"	"
North Ophir.....	"	"	"
Wide West.....	104	66 @ 95	"
Real Del Monte.....	23	470 @ 500	"
Utah.....	10	47 1/2	"
Pond.....	"	"	"
Grass Valley.....	223	88 @ 110	"
Michigan, G. H.....	"	"	"
Ural.....	"	"	"
Bodie No 2.....	"	"	"
Blue Ledge.....	"	"	"
Napoleon, Copper.....	"	"	"
Oneida.....	"	"	"
St. George.....	"	"	"

NEW SHAWL STORE:—On Saturday evening Mr. J. D. Robert opened his New Shawl Store, No. 123 Montgomery street. We notice, until late in the evening an admiring crowd gazing at the beautiful patterns displayed in the window. No greater variety of patterns, richer in hue or finer in texture, can be found in London, Paris or New York, then are here displayed by Mr. Robert, from the richest Persian camel-hair down to the lower grade of American woolen. We wish him success in his enterprise.

Mr. H. B. Sontag, at the Mission, has one thousand thrifty-looking tea-plants of this year's growth, from seed procured by a Gentleman in China. As tea-plants must be four years old before the leaves are suitable for picking, some time must elapse before the success of the experiment of growing tea in California can be determined.

REPORT OF BIDS  
At the San Francisco Mining Stock Board.  
For the week ending Oct. 3, 1863.

Name of Companies.	Shares per R.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Latest Asking Price.
<b>WASHOE STOCKS.</b>									
Ophir.....	12	\$300	2025	2050	2100	2160	2100	2100	2175
Gould & Curry.....	4	500	—	4050	4750	4650	4550	4600	4900
Savage.....	1	—	—	—	2600	—	—	2800	—
Chollar.....	4	300	850	—	800	830	860	880	905
Potosi.....	2	500	1000	1200	1250	1300	—	1350	1475
Hale & Norcross.....	2	500	—	—	—	—	1000	800	—
Sierra Nevada.....	1	500	92 1/2	91 1/2	92 1/2	92	94	100	100
Daney.....	4	500	110	106	100	95	90	92 1/2	95
Burning Moscow.....	2	100	13	140	172 1/2	185	165	167 1/2	165
North Potosi.....	1	300	40 1/2	42	50	45	—	40	44
Norton.....	1	125	30	17	17	16	15	15	12
Charles Caney.....	1	500	—	—	—	—	—	—	46
Sacramento.....	1	500	—	—	—	—	—	—	70
Iowa.....	1	—	—	—	—	—	—	—	90
El Dorado.....	1	—	60	50	60	61 1/2	75	87 1/2	70
Norton.....	1	—	4 1/2	4 1/2	5 1/2	6	7	6 1/2	7
Barnsido.....	—	—	7 1/2	7 1/2	7 1/2	—	8 1/2	8	9
Adriatic.....	—	—	3 1/2	2 1/2	—	2 1/2	4	—	6
Pride of the West.....	—	—	—	25	33 1/2	36	—	—	10
G. H. Quartz M. Co.....	—	—	—	—	—	—	350	400	475
Imperial.....	—	—	—	—	—	—	—	—	—
Cedar Hill Tunnel.....	1	100	—	1	—	—	—	—	—
Mount Davidson.....	1	200	—	—	—	1 1/2	1 1/2	1 1/2	—
Central.....	12	300	—	—	—	—	—	—	—
California.....	12	300	—	—	—	—	—	—	—
Rogers, F. D.....	1	250	—	—	—	—	—	—	—
Lucerne.....	1	100	—	—	—	—	—	—	—
Lady Bryan.....	1	600	—	—	—	—	—	—	—
La Crosse.....	—	—	—	—	—	—	—	—	—
Mesa.....	—	—	—	—	—	—	—	—	—
Porter.....	—	—	—	—	—	—	—	—	—
Crown Point.....	—	—	—	—	—	—	—	—	—
Manhattan.....	—	—	—	—	—	—	—	—	—
Hudson.....	—	—	—	—	—	—	—	—	—
Lady Ellen.....	—	—	—	—	—	—	—	—	—
Schiller.....	—	—	—	—	—	—	—	—	—
Seneca.....	—	—	10	—	—	—	—	—	—
Vesuvius.....	—	—	10	—	—	—	—	—	—
<b>ESMERALDA STOCKS.</b>									
Wide West.....	1	600	78	76	72 1/2	71	65 1/2	66	65
Antelope.....	1	300	—	140	135	125	—	12 1/2	165
Esmeralda.....	1	1000	22	—	20	21	—	20	30
Real Del Monte.....	1	400	410	460	450	450	—	430	500
Utah.....	—	—	150	—	45	—	—	62	—
Silver Hill.....	1	500	—	—	18	15	—	20	22
Nevada.....	—	—	250	—	12 1/2	—	—	12 1/2	20
Federal Hope.....	1	—	—	—	—	—	—	—	—
South Utah.....	—	—	—	—	—	—	—	—	—
Jenny Lind.....	—	—	—	—	—	—	—	—	—
Falls of Clyde.....	—	—	—	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	5
Sunbeam, S. W. ex.....	—	—	—	—	—	—	—	—	2
Bamboo.....	—	500	—	—	—	—	—	—	45
Great West Tun.....	—	—	—	—	—	—	—	—	3
Burlington.....	—	—	—	—	—	—	—	—	40
El Paso.....	—	—	35	—	—	25	—	—	—
Crockett.....	—	—	12 1/2	—	—	15	—	—	65
Atua.....	1	100	—	—	—	—	—	—	—
<b>COSO STOCKS.</b>									
Josephine.....	2	250	—	—	9	—	10	—	12
Willow Springs.....	1	100	5	4 1/2	—	—	—	—	6
Empire.....	—	—	—	—	—	—	—	—	—
Coso.....	—	600	11	13	11	—	11	—	15
<b>MEXICAN MINES.</b>									
Mina Prieta.....	—	1000	—	—	—	—	—	—	—
Disa Prieta.....	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon.....	1	600	70	70	70	67 1/2	—	—	90
Josephine.....	—	—	5	9	5	4 1/2	4 1/2	5	8
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill.....	—	—	—	—	—	2 1/2	—	—	5
Rio es Diggins.....	—	—	—	—	6	12	—	—	40
Eureka.....	—	—	—	—	—	—	—	—	—
Fellowes.....	—	—	—	—	—	—	50	—	100
Rock River.....	—	—	—	—	—	—	—	—	65
Utica.....	—	—	—	—	—	—	—	—	—
<b>HUMBOLDT STOCKS.</b>									
De Soto.....	—	—	20 1/2	—	—	—	—	—	40
Great Basin.....	—	—	—	—	—	—	—	—	18

## ESMERALDA.

The mining share market in this district, the past week, has been quite active, a considerable amount of stock having changed hands at advanced figures. The Cortez consolidated and Clan Alpine having been sought after at a slight advance over quotations.

The Geraldine on Silver Hill, south of the Young Winnemuck is down to the depth of about 30 feet; the ledge is four feet wide, and prospects rich in silver, the rock is similar to the Yancy and Seymore on the same hill.

The Broadhead, on the top of Silver Hill, about 40 yard south of the Young Winnemuck, is a well defined ledge, and from present indications will yield as rich returns as any claim on that hill, the claim has been but little worked, but the rock is rich in both gold and silver.

The Walrath tunnel on the south-west side of Silver Hill below the Antelope is now in, a distance of 260 feet; the tunnel is five feet wide by 6 1/4 feet in height. The work is progressing day and night. This tunnel was located early this Spring and is being prosecuted with more energy than any one in this district. Therein, four ledges have been struck, one of which, (a blind ledge,) is even 12 feet wide, and assays \$134 per ton. The stock is mostly owed in San Francisco and none of it is offered in this market.

## ESMERALDA STOCK LIST.

[Corrected for the Mining and Scientific Press, Oct. 2, 1863.]

Bid.	Asked.	Bid.	Ask.
Alpine.....	\$3 10	Kenny.....	—
Amador.....	5	Lily Dale.....	20 35
Atlantic.....	8	Live Yankee.....	20
Arcade.....	10	Lord Byron.....	12
Antelope.....	6	La Plata.....	12
American Prospect Tunl.....	7	Laurel Hill.....	2 6
Antelope.....	200	Middle Hill Tunl.....	40
Alturas.....	250	Mina Real.....	15
Atua.....	—	Mina Real.....	15
Brazo.....	10	Monte Christo.....	40
Bodie Bluff Consolidation.....	9	Monte Christo, Tunnel co.....	40
Bodie Bluff, Bodie District.....	8	Mutual.....	10
Bodie Bluff, No. 1.....	3	Mount Ida.....	10
Bamboo.....	16	Mary L. Gardner.....	125
Brewster.....	10	Mina Real.....	15
Bullion (Van Horn Dist.).....	3 1/2	Martinez Tunnel.....	3
Bodie Bluff, No. 2.....	16	Meredith.....	15
Bunker Hill.....	6 1/2	North Willow Springs.....	30
Banquette, Tunnel comp.....	—	New Kameralda Consol.....	2
Bodie Bluff, Tunnel.....	—	Newton.....	—
Canaan.....	11	Nevada, (Tunnel).....	20
Crockett.....	76	Old Winnemuck.....	6
Cape.....	6	Paul Tunnel Co.....	6
Clan Alpine.....	8 1/2	Pacific.....	—
Cortez.....	16	Pond.....	—
Daney.....	10 16	Pride of Antelope.....	10 16
Daniels, consolidation.....	—	Penny (value to the share).....	16
Durgen.....	10	Penny (value to the share).....	16
Delta.....	8	Real Del Monte.....	410 450
East Essex Ex. Ural.....	10	Rebecca.....	—
Excelsior, Excelsior Dist.....	2	Red, White & Blue.....	10
Empire.....	20 25	Stanford Tunnel Co.....	15
Franklin, Tunnel company.....	10	Schenectady.....	—
Fuller.....	—	Strawberry.....	—
Fuller, Consolidation.....	—	Silver Hill.....	60
Fresno.....	12	Silver Hill, Bodie District.....	15
Falls of Clyde.....	8	Seymour.....	10
Great Eastern.....	—	St. Louis.....	—
General Hooker (Con.).....	5	Tuscan.....	—
General Jackson.....	—	Tiger.....	—
Garibaldi.....	30	Tucker.....	15
Golden Harvest.....	5	Union Tunnel.....	25
Golden Cross.....	10	Union Tunnel.....	20
Governor Seymour.....	25	Utah.....	120
Golden Age.....	40	Ural proper.....	165 185
Great Britain.....	5	Ural [extension].....	6 10
"Golden Era" Tunnel Co.....	—	William Tell.....	10
Greenback.....	20	Wide West.....	—
Hanover.....	10	Washington, Tunnel comp.....	—
Howard Summit.....	15	Western Summit.....	75
Heath.....	15	X-Eliza and Constantine.....	—
Herman Consol.....	15	consolidated.....	—
Home Check, Excelsior Dis.....	3	Yancey.....	40
Juulata.....	10	Cortez, consolidated.....	6 10

[The following letter, dated Sept. 24, 1863, from our regular Esmeralda correspondent, was intended for our last issue, but did not arrive until after we had gone to press.]

Since I last wrote you there has been no change, to quote, in the stock market of importance. Owing to a compromise about being made between the "Utah" and "Cortez Consolidated Mining Company," I learn that the Cortez stock is held firm at \$15 and but little offering.

Sixty shares Clan Alpine were offered to day for \$12, \$9 bid.

The Del Monte and Pond companies on Last Chance Hill are again working their claims with renewed energy. Since Monday last, the Del Monte Company have had 150 men at work taking out rock, which is being crushed at Messrs Starks, Fogus & Lake's mills; the four mills are running day and night on the Del Monte work.



**ARMING MAIL STEAMERS.**—It is announced to be the intention of the Pacific Mail Steamship Company to arm the new steamers which they are about to dispatch to this side. It is the intention to place on board of the ships, ten 20-pound Parrot guns.

**PATENT CLAIMS.**—We will furnish, on application, the claim of any invention that has been patented within the last fourteen years. The name of the patentee—date of patent, when known, and two dollars for copying should be sent.

**MODELS.**—Inventors will please attach to all models sent to us, their names and address, in a legible, permanent form, this will avoid confusion and prevent errors.

**DRAWINGS.**—We have highly talented and efficient Draughtsmen, by whom drawings of every description are executed in the best style of art, with promptitude, and at a moderate cost.

### WANTED

By a competent person, the Secretaryship of four Mining Companies. Books to be kept at the Office of the Mining and Scientific Press, No 57 Government House. Enquire as above. oct6

### AGENTS WANTED.

We want a good Agent in every city, town and settlement, on this Coast. Applicants will send their names with reference, when specimen numbers of the **Mining & Scientific Press** will be forwarded to them, and their names added to our published "List of Agents." EWER & SMITH.

### PARTNER WANTED.

The Proprietor of one of the oldest and most profitable country newspapers in the State is desirous of taking in a partner. He wants to dispose of one-half of his office to some gentleman well calculated to take charge of the editorial department, as he is a practical printer himself. For further particulars enquire at this office. oct4

### MINING LAWS AND FORMS

**JUST PUBLISHED BY H. H. BANCROFT & CO.,** being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. sept14

### R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,

**JOB TURNING & SCROLL SAWING.**

### BRACKETS,

RED WOOD BALUSTERS,

NEWEL AND CEDAR BALUSTERS  
for Stairs.

Manufacturers of every description of Oval,  
Circular and Square

**PICTURE & LOOKING GLASS FRAMES**

For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS.

H. C. SOMES

### R. W. FISHBOURNE,

**PRACTICAL LITHOGRAPHER,**

ENGRAVER AND PRINTER,

**NO. 529 CLAY ST. CORNER OF LEIDSDORFF,**  
San Francisco. State and County Bonds, Stock  
Certificates, Bills of Exchange, Bills of Lading, Bank  
Checks, Landscapes, Architectural and Marine Views  
Show Cards, Labels, Etc., executed with neatness and  
dispatch. N. B. All orders in Crayon Work promptly  
attended to.

### MINING.

N. B. Mining Stock Certificates executed with promptness and dispatch, and at greatly reduced rates. jyj6

**MYERS & DAGGETT'S**

**Mining and Stock Exchange,**  
No. 23 1/2 B Street, Virginia City, N. T.

**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\*.\* Abstracts of Titles Furnished, Etc.

### GENERAL NOTICES.



**DR. H. AUSTIN,**  
DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

### DESKS

AND

Office Furniture,  
OF ALL KINDS..... FOR SALE BY

**JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBING, of all Kinds, attended to.

### SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR  
FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1863

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

### CHARLES GEDDES,

**ARCHITECT,**

Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms,  
jy 20 San Francisco

### FREDERICK MANSELL,

**MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,**

No. 423 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

### New Patent Agency.

**WE HAVE CONNECTED WITH THE**  
Publication of the "MINING AND SCIENTIFIC PRESS"

**The Patent Agency Business,**

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency**  
The most desirable place to make application for Letters Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

### FOREIGN PATENTS OBTAINED

By application at this office, Room 57 Government House, EWER & SMITH, Solicitors.

### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

### PATENT RIGHTS.

**Patent Rights Bought and Sold,**  
At the office of the "Mining and Scientific Press" Agency  
EWER & SMITH.

### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

### Offices To Let,

In the Government House, Corner of Washington and Sansome Streets. Two large suits of Offices, the most commodious and accessible in the city. C. A. CRANE, Proprietor

### GENERAL NOTICES.

### HAYNES & LAWTON,

IMPORTERS AND DEALERS IN

**CROCKERY,**

GLASS WARE,

**FRENCH CHINA,**

Coal Oil Lamps, Table Cutlery

**CLOCKS,**

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCHANT.]

SAN FRANCISCO.

### WHEELER'S

**Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\*.\* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. 2016-1f

ZENAS WHEELER.

### Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,**

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

### REMOVAL.

**OFFICE OF THE PACIFIC METAL**  
Surgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

### NATHANIEL GRAY,

**General Furnishing Undertaker,**

641 Sacramento st., Cor. of Webb,

SAN FRANCISCO.

GEO. A. MFCALF.

D. S. HUTCHINSON.

### METCALF & HUTCHINSON'S

**PHOTOGRAPHIC GALLERY,**

650 Washington st. Three doors below  
Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

**\$3. Per Dozen!**

Large sized Photographs \$3—Extra copies \$1 each.  
AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.  
Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

### HOTELS.

### International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

**FIRE-PROOF BRICK BUILDING.**

Most convenient to the

Steamer's Landing, Business sta. & Places of Amusement

**OPEN ALL NIGHT.**

City Railroad Cars Pass the Door.

**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**

and SETS AS GOOD A TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

### Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY** advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,

**WHICH SECURES TO OUR GUESTS QUIET.**

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL. F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

### THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.

H. T. FELTON

W. C. MINOR,

PROPRIETORS.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

**The Rooms are handsomely furnished,** supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House **Free of Charge.**

The House is open all night.

### P. M. S. C. O.

**PACIFIC MAIL STEAMSHIP COMPANY'S**  
line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the month of September, 1863.

Sept. 13th, - - - - Steamer **Orizaba.**

Sept., 23d, - - - - Steamer **Golden Age.**

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.

And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidsdorff sts.



FOUNDRIES & MACHINE SHOPS.

**REYNOLDS'**  
**Patent Cut-Off and Governor,**  
**FOR STEAM ENGINES.**

127 of these Invaluable Machines,  
ARE NOW IN USE  
in California and Nevada Territory, giving a perfectly  
regular motion and  
Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor**  
is the CHEAPEST, SIMPLEST and QUICKEST to act  
and least liable to get out of order of any Governor in  
use. It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.

**Clark's Steam and Fire Regulator,**  
for controlling the Draft or Blast by opening the Chimney  
or Valve in the Blast Pipe by the pressure of the  
steam in the boiler. It will regulate the pressure to  
pound, on the square inch. It cannot get out of order  
and any person can put one up in an hour after the damper  
is put in.

**Ingersoll's Patent Drill Press,**  
with which drilling can be done the same as with the  
common ratchet, and when small holes are wanted, it  
can be done four times as fast. The handle can be worked  
in any direction.

**Felt for Steam Boilers, Pipes, Etc.**  
at the lowest market rates.

**Steam Engines, Boilers, Pipes,**  
Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.

**Anti Incrustation Powder,**  
Sure Remedy for Scale in Steam Boilers, without inju-  
ry to the iron. In use for the past EIGHT years.  
Refer to—Sugar Refinery, San Francisco,  
Cottrell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.  
**E. T. STEEN AGENT.**  
No. 33 Fremont Street, San Francisco.

**MOYNIHAN & AITKEN,**  
**Boiler Makers and Blacksmiths,**  
Mission, between Beal & Fremont Sts,  
San Francisco.

**N. B.** All kinds of Boiler and Sheet Iron Work ex-  
ecuted at the shortest notice, and on the most reasonable  
terms. Jy 29

**PUMPS!**  
**HARRISON'S**  
**California Lift and Force Pump,**  
WITHOUT VALVES OR PACKING,  
Suitable for Mines, Fire Engines, Wrecking or Irriga-  
tion. This is the Cheapest, Lightest and most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

**ALL SIZES;**  
Capable of throwing from ONE HUNDRED to FIVE  
THOUSAND Gallons per Minute—For sale by  
**C. H. HARRISON,**  
**PHOENIX OIL WORKS,**  
No. 15 517 Front Street, San Francisco.

**50 lbs. MARINE and**  
**Fire-Proof Paint,**

MANUFACTURED BY THE PACIFIC METALLURGICAL  
Works in this city, for the Hulls and Decks of Vessels  
on ground. Mineral Rock contains Arsenic, Copper, Li-  
thium and six other Minerals. When used on the Decks  
of Steamships, it is equal to a coat of Stone, and  
is equal to Copper, no worms will ever effect it, and  
cheaper than any other paint.

**DIRECTIONS:**  
For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Lined Oil.  
For Bottoms of Vessels, use one part ground sulphur,  
two parts Mineral Paint, mix with Coal Tar and apply  
hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes  
of 10 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**  
When used on Roofs, Buildings, or Fences, it is equal  
to covering them with a coat of Stone, being perfectly  
Fire Proof, and costing less than any paint.

**DIRECTIONS:**  
MIXTURE—Mix three parts Mineral Paint with one part  
white lead, thin with Lined oil: If a lighter color is  
wanted, mix less paint, more lead.  
DOSE—Five parts of Mineral Paint, one part white  
lead, mix with Lined oil. Put it thick on a tin Roof  
the coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
T. Forquet, Superintendent.  
**WORKS, North Beach; Office, 509 Sacra-**  
**mento st., San Francisco.**

FOUNDRIES & MACHINE SHOPS.

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19, First Street, San Francisco,  
Furnish Castings and Machinery of all kinds

ALSO:  
**GENUINE WHITE IRON SHOES AND DIES.**  
**PALMER, HANSCOMB & CO.**

**To Quartz Miners.**  
**Knox's Improved**  
**AMALGAMATING PAN,**  
WITH  
**PALMER'S PATENT STEAM CHEST.**

**THE ABOVE COMBINATION SECURES THE MOST**  
complete amalgamation of the precious metals of  
any process now known.  
It is steam introduced in the most effective and eco-  
nomical in a neat, while it is peculiarly adapted to the  
cutting of floating gold and silver, known to be other  
wise lost. Made exclusively by  
**PALMER, HANSCOMB & CO.,**  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. **W. A. PALMER.**

**JOHN P. Gallagher.....JOSEPH H. WEED.**  
**GALLAGHER & WEED,**  
**BRASS & BELL FOUNDRY**  
**AND**  
**LOCK FACTORY.**

No. 125 First Street, opposite Minna, next door to Pacific  
Foundry, all kinds of  
**Brass and Composition Castings and**  
**Finishing, done with neatness and**  
**dispatch.**

**CHURCH AND STEAMBOAT BELLS, OF ALL SIZES**  
Made to order. Engineers Gongs made and hung  
in the best manner. Banks, Vault, Store and Prison  
Locks, also brass Padlocks and Shop Locks of various  
patterns, on hand and made to order.  
Particular attention given to casting Rudder Braces  
and Ship Work in general.  
All Jobs promptly attended to.—Prices  
moderate.  
Removed from Oregon street, between Front and Davis.

**Miners' Foundry**  
—AND—  
**MACHINE WORKS,**  
First St., between Howard & Folsom,  
SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS MACHI-**  
nery, the Best and Most Economical, manufactured  
in the state of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:  
Steam Engines and Boilers, Flour, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgama-  
tors and Water Wheels—some in operation and on exhibi-  
tion.  
Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.

All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere  
**HOWLAND, ANGEL & KING**  
San Francisco, February 23, 1863.

**San Francisco Machine**  
.....AND.....  
**IRON WORKS!**  
Northeast corner Fremont and Mission Streets.

**ALL KINDS OF MACHINERY MADE TO ORDER ON**  
most reasonable terms.  
Steam Engines, High and Low Pressure; Quartz  
mills, Saw mills, Mining Pumps, Hoisting machines for  
mining purposes, Wine Presses, Agricultural implements  
etc, etc, and Castings of all descriptions made to order.  
Steam Engines exchanged and for sale by  
**DEVOR, DINSMORE & CO.**  
REPAIRING promptly attended to.  
**FOR SALE.**  
San Francisco, July, 1863. Jy13

FOUNDRIES & MACHINE SHOPS.

**VULCAN IRON WORKS COMPANY**  
**P. Torquet, Manager,**  
**STEAM ENGINE BUILDERS**  
and  
**BOILER MAKERS,**  
**Iron Founders and General Engineers,**  
No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and quartz-crushing  
Machinery.  
Shoes and Dies of the hardest iron,  
Russia Iron Punched Screens.  
Steamboat Machinery: Saw, Flour and Sugar Mills.  
High and Low Pressure Boilers of all Styles.  
JONVAL and other Turbine Water Wheels with latest  
improvements.

**W. T. & J. GARRATT,**  
**City Brass and Bell Founders**  
Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE**  
and Lift Pumps, Church and Steamboat Bells, Tay-  
ern and Hind Bells and Gongs, Hose and all other joints,  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PIPES and NOZZLES for MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.,  
COUPLING JOINTS of all sizes. Manufacturers of "Gar-  
ratt's Patent Improved Joint Metal."

**D. MORRIS,**  
**MACHINE SHOP,**  
227 Market, corner of Beale Street.  
Manufacturer of  
**WARRANTED FIRE-PROOF SAFES**  
Mill Work, of all kinds made to order. All kinds of  
Repairing done at moderate prices. Jc13

**LEWIS COFFEY AND RISDON,**  
**STEAM BOILER AND SHEET IRON**  
**WORKS.**  
The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.  
Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
**LEWIS COFFEY J. N. RISDON.**

**THEODOR KALLENBERG**  
**Maker of Models**  
**FOR INVENTORS.**  
**MACHINES, MATHEMATICAL, Optical and Philosophi-**  
cal Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to.  
No. 418 Market street, San Francisco.  
n7.3m San Francisco.

**HIRAM WRIGHT,**  
**PICK MAKER,**  
Has established a Manufactory for the Making of  
**MINER'S PICKS,**  
at  
NO 121 BUSH STREET, SAN FRANCISCO,  
[Between Sansome and Battery.]

WHERE can be had a superior Pick for Miners use  
As he manufactures all his picks under his own personal  
supervision, he warrants them as being made of the  
best material and by the best workmanship.  
Orders attended to and filled promptly and with dis-  
patch. aug17

**WRIGHT'S PICKS.**  
**JOHN WRIGHT,** of Sacramento, has established him-  
self in San Francisco, for the manufacture of every  
description of PICKS, of the best material, at reduced  
prices. PICK EYES of the best iron furnished in any quan-  
tity, at low rates. Orders from the country promptly  
attended to. N. B.—None genuine unless stamped with  
my name. **JOHN WRIGHT, 611 Market street,**  
Opposite Battery, San Francisco.

**CALIFORNIA TOOL WORKS!**  
**John Weichhart,**  
Manufacturer of  
**All Kinds of Edge Tools, Etc.,**  
Plane Irons Moulding Irons, Stone Cutter's Tools, etc  
No. 22 Fremont street, bet Market and Missio  
San Francisco, July 14, 1863.

**THE REBOUND.**—"Cosmos" of Virginia  
City, in speaking of the extraordinary rush for  
Reese River, says:

"Speaking of Reese River a gentleman  
who has just come in from there, says he  
passed 400 wagons in the distance of 70 miles,  
and as he had an eye to the fair, he says there  
were 72 women in the crowd, rushing onward.  
Verily the migratory wave which for so many  
years has been moving onward with the cry  
of "Westward, ho!" having met the waters  
of the Pacific, now rebounds in its eagerness  
for new lands, and Eastward it moves, to fill  
up that uninhabited space which lies between  
the Sierra Nevada and the western limits of  
the Western States.

**CAMEL TRAIN:**—A train of camels is run-  
ning from the Humboldt salt mines to Vir-  
ginia City, packing salt for the Humboldt salt  
company. This is found to be a cheap mode  
of transportation. Each camel is able to pack  
from 800 to 1,000 pounds. It costs nothing  
to keep them, as they will fat on sagebrush  
and greasewood, and the deserts which are so  
hard on horses and mules, are just what cam-  
els thrive on.

**MUNIFICENT BANKER.**—Peabody, the Amer-  
ican banker, in London, has signified a desire  
to give Yale College one hundred thousand  
dollars for a geological fund. Although Pea-  
body does not reside in his native country, he  
does not altogether neglect or forget it, as  
may be seen by his many acts of munificence  
to our public institutions.

**TREASURE FROM THE NORTH:**—The Steamers  
from the North are now bringing down large  
amounts of treasure every trip. The Brother  
Johnathan, which arrived on Monday, brought  
\$294,600. Of this amount \$259,600 is from  
Portland.

**Eye, Ear and Throat.**  
**DR. DE CASTRO,**  
**Oculist and Aurist,**

**WHO HAS PRACTISED IN NEW**  
York and all the principal cities of Europe with  
such unrivalled success, and from each place is in pos-  
session of the most eminent testimonials, may now be con-  
sulted upon diseases of these delicate organs, with a view  
to their permanent cure. Deafness of long standing thor-  
oughly cured. The Doctor employs his (by the Medical  
Society of London approved)

**Self-adjusting Artificial Tympanum,**  
For the relief of deafness, attended by loss or injury of  
the membrana tympani, and for the cure of discharge  
from the ear—the invention of Dr. Castro, M.D., author  
of "Deafness Practically Illustrated as to its Nature and  
Treatment," etc.

The self-adjusting Artificial Tympanum was first intro-  
duced to the notice of the profession at the meeting of the  
Medical Society of London, on the 20th of November,  
1863. An animated discussion ensued on the reading of  
the paper, and several members of the Society bore testi-  
mony to the success of the remedy and the importance of  
the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-  
Adjusting Artificial Tympanum, as he had observed the  
immense benefit a young lady friend of his had received  
from it. She was in fact, quite deaf, and in a most mis-  
erable state: the effect of the tympanum was instantane-  
ous—quite like a miracle. Five more testimonials from  
Members of the Medical College, New York, and the prin-  
cipal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and  
Kearny streets. Entrance on Market street.

**Dr. Editor—Having been afflicted**  
with deafness for the last two years, originating from  
a severe cold, and for the last month suffering from the  
most excruciating pains in my ear, I was obliged to come  
down to San Francisco to seek relief. After a physician's  
recommendation to wait on Dr. De Castro, on the corner of  
Kearny and Market streets, and underwent one operation,  
and it was with the utmost pleasure I can say my hearing  
was suddenly and without pain entirely restored. I deem  
it my duty to make this known to the public, and to re-  
commend Dr. De Castro's skill as an aurist.

**JOHN REESE, Napa Valley.**  
James Callaghan, witness.  
San Francisco, July 30th, 1863.

[From the Daily Alta.]  
San Francisco, June 30th., 1863.

**ED'S DAILY ALTA:**  
Permit me through your widely circulated journal, to  
say, that my daughter Mary Ellen, has been afflicted with  
deafness since she was thirteen months old, and that she  
has been a member of the Deaf and Dumb Institute since  
it was organized. On taking her to Dr. De Castro, on the  
corner of Kearney and Market Streets, and undergoing un-  
der his direction, two operations, she has heard sounds  
very distinctly: and is now, I am happy to testify in a fair  
way to get permanent relief. The result, thus far, is sat-  
isfactory; and I deem this notice due to Dr. De Castro for  
his skill; and would recommend all parties similarly af-  
fected to give him a trial. My daughter has at different  
times been under the care of the most skillful physicians  
and aurists in California, but up to the period of visiting  
Dr. De Castro, received no benefit.  
**CHAS JOHN P. WRIGHT,**  
812 Green Street.



## MINING NOTICES.

**Wide West Copper Mining Company, Office.** 528 Montgomery street, San Francisco, September 10, 1883.—Notice is hereby given that an assessment of Twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, and payable immediately, in U. S. Gold Coin, to the Secretary, at the office of the Company, or to J. M. Pike, Superintendent, at Copperopolis.  
By order of the Board of Trustees,  
sept4 M. G. ELMORE, Secretary.

**Bald Eagle Gold Mining Company,** Gold Flat District, Nevada County, Cal.—Notice is hereby given that a assessment of Twenty-five cents per share was this day, (September 9th, 1883,) been levied by the Board of Trustees on the Assessable Stock of the above named company, and payable immediately in United States Gold Coin to the Secretary at his office, or to T. S. Smith, Superintendent, Grass Valley, Nevada Co.  
By order of the Trustees,  
T. L. BIBBINS, Secretary, 105 Montgomery Street.  
sept13lm

**Winona Gold and Silver Mining Company.**—The first annual meeting of the stockholders of the Winona Gold and Silver Mining Company, will be held at the Company's office, No. 428 Montgomery street, for the election of five Trustees for the ensuing year, on the 19th day of September, 1883, at 7½ p. m. By order of the Board of Trustees,  
M. G. ELMORE, Sec'y.  
aug24

**Red Jacket Mining Company.**—At a meeting of the Board of Trustees of the above company held July 7, 1883, the first assessment of Five Cents per share on the capital stock was levied, payable immediately in United States gold coin, to the Secretary, office 429 Montgomery street, Room No. 2.  
By order of the Board.  
aug24 J. W. CROSLY, Secretary.

**Notice is hereby given that an Assessment** of ten (10) cents per share on each and every share of the Capital Stock of the Buena Vista Gold & Silver Mining Company—Fort Pitt Ledge, Prince Royal District, Humboldt County, Nevada Territory—was this day levied, payable immediately in U. S. gold coin, to the Secretary at No. 413 Montgomery street, San Francisco.  
By order of the Board of Trustees  
H. B. MINOTT, Secretary.  
September 22, 1883. sep28

## Mining Shares For Sale

BY  
O. A. CRANE,

Office 28 Government Block.

475 Shares U. S. Mining Company, Virginia City.  
910 Shares Granada Gold and Silver Mining Company Virginia Hill, Virginia City.  
168 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.  
20 Shares Mohave Mining Company, La Paz District, Colorado, N. M.  
30 Shares Aspinwall Gold and Silver Mining Company, Devil's Gate District, N. T.  
75 Shares Washington Copper Mining Company, Indian Bar, Tuolumne Co.  
228 Shares Montezuma Gold and Silver Mining Company, Lugo District, Tulare Co.  
90 Shares Owen's County Consolidated Gold and Silver Mining Company, Lugo District, Tulare Co.  
50 Shares Crown Point Ravine Gold and Silver Mining Company, Virginia District, N. T.  
10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California.  
sep28

JOHN ARMSTRONG. WM. P. WILDER.

## ARMSTRONG &amp; WILDER,

VIRGINIA CITY, N. T.,

SEARCHERS OF RECORDS  
for Mining Claims & Real Estate.

RELIABLE ABSTRACTS  
guaranteed at reasonable prices.  
LETTERS OF ENQUIRY  
promptly answered.

sep28

**Utica Gold & Silver Mining Company,** Office, 528 Montgomery Street, San Francisco, Sept. 18, 1883.

Notice is hereby given, that in accordance with the laws of the State of California, and the resolutions adopted by the Board of Trustees of the Utica Gold and Silver Mining Company, Esmeralda District, there will be sold at Public Auction, at the Office of the Company of Friday October 23, 1883, at 10 o'clock A. M., so many delinquent Shares of the Capital Stock of the Utica Gold & Silver Mining Company, standing in the names of the following named persons, as will be necessary for the payment of the assessment of ten cents per share, levied June 12, 1883, and two dollars per share levied August 10, 1883, together with cost of advertisements and expense of sale, unless said assessments with accruing charges are previously paid:

Names.	Certificates.	Shares.	Amount.
G. B. Lott,	No. 7,	20,	42.00.
L. B. Church,	" 11,	20,	42.00.
G. H. Gray,	" 19, 25,	40,	84.00.
J. F. Gilbert,	" {27, 31, 34,	180,	360.00.
	{29, 32, 35,		
	{30, 33, 36,		
	{37, 40, 43,		
F. A. Baker,	" {38, 41, 44,	180,	378.00.
	{39, 42, 45,		
G. L. Church,	" 47, 53, 54, 55, 56,	35,	72.00.
Geo. Morrow,	" 62, 63,	15,	30.00.
J. Meyer,	" 68,	5,	10.00.
J. Kamsler,	" 69,	5,	10.00.

San Francisco, Sept. 18, 1883.

Im

## MINING CARDS.

## OWEN'S RIVER CANAL COMPANY.

Capital Stock.....\$1,000,000.

10,000 Shares.....\$100 per Share.

A Portion of this Stock is no offered to the public, and recommended as an investment.

## FULL PAID AND UNASSESSABLE

Stock, also Assessable Stock, can be obtained of A. J. DOWNER & CO., the authorized Agents of the Company, 406 Montgomery street.

President.....R. S. WHIGHAM.  
Secretary.....W. FISK HITCHCOCK.  
Treasurer.....MONTGOMERY GOOLY.  
Superintendent.....WILLIAM FLEMING.  
Engineer.....J. E. CLAYTON.

## TRUSTEES:

R. S. WHIGHAM, formerly of Whigham's Mill, Nevada City.  
WILLIAM FLEMING.....of San Francisco.  
SPENCER KIDDE.....Paying Teller of Parrott & Co's.  
ISAAC SWAIN.....of A. J. Downer & Co.  
WILLIAM P. PRATT.....of Nash & Fogg.  
Office of Company 328 Montgomery street  
28sep

ALEXANDER STOTT,  
MINING SECRETARY,

512 Sansome Street, San Francisco.

Secretary of—

HORSE SHOE, Silver and Copper, Monte Diablo.  
DANIEL WINTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FISARO, Gold and Silver, Alpine District. au10

T. C. Sanborn & Co.  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.

## OPHIR SILVER MINING STOCK,

GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

J. F. MILLER. W. C. COLEY.

MILLER & COLEY,  
Stock Brokers & Mining Agents

327 MONTGOMERY STREET,  
Between California and Pine, in Jerome Rice & Co's Real Estate Sales Rooms, San Francisco.

ALL KINDS OF STOCK AND MINING  
Business attended to with Promptness  
and Dispatch  
aug17

L. F. LELAND,  
STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11 A. M.; 2½ to 3½ P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

E. T. PEASE, R. S. CORNING, SAM'L C. BOWLEY

PEASE, BOWLEY & CO.,  
Real Estate, Stock and Exchange  
BROKERS,

621 Montgomery street, San Francisco.

LEGAL TENDER NOTES AND MINING STOCKS,  
BOUGHT & SOLD.  
je-29

## AGENCY

For the Purchase and Sale of

## MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.

WM. FAULKNER.

## New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

je-29

MORGAN, STONE & Co.  
108 Front Street, San Francisco.

## BUSINESS CARDS.

## Napoleon Copper Mining Company.

Capital Stock.....\$1,630,000.  
2,700 Shares—\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACCRELLISH  
Secretary.....R. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....A. W. HASKELL

## TRUSTEES.

F. MACCRELLISH, of Alta California  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TECKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je-29

THE EUROPEAN  
ORE REFINING  
COMPANY.

Quartz Mill and Furnaces, Bryant Street,  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF

## ORES AND MINERALS.

In large or small quantities, for such Experienced Treatment by the

## LATES EUROPEAN METHODS,

As may be ascertained by

## CAREFUL ANALYSIS,

At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.

328 The South Park, and Folsom and Kearny street Cars pass Bryant street.  
au31

## The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-uf Montgomery Street, San Francisco.

## MARTIN &amp; Co.,

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

## Purchase of Copper Ores:

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.  
Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York, San Francisco.  
San Francisco Post Office, Box 1259.  
je 1.

San Antonio Gold and Silver Mines,  
LOWER CALIFORNIA,

## FORWARDING &amp; MINING AGENCY.

SAMUEL SMITH,

OFFICE—North West Corner of Front and Clay Streets, San Francisco.

MINING MACHINERY AND MERCHANDISE FORWARDED, Mining Claims secured, through the resident Agent at San Antonio, and information furnished regarding any claim, in that Territory, on Commission.  
je-26

H. C. KIBBE,  
MINING SECRETARY,

Commissioner for Nevada Territory,

543 Sacramento st., cor. Montgomery

(ARMORY HALL.)

## BUSINESS CARDS.

## SOUTH PARK

## Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO,  
Office in Shiel's Block, opposite Masonic Temple,  
je13 S. F. CLOUSER, Secretary.

W. W. HANSCOM,  
Steam and Mechanical Engineer,

Designs furnished, and Drawings made for Engines, Mills, Water Wheels, Mining Machinery, etc., etc.

At Golden State Iron Works,  
aug x First Street, San Francisco.

TO MINING COMPANIES!  
Offices To Let.  
SUITES OR SINGLE ROOMS,  
in Government Block,  
N. W. Cor. of Sansome and Washington sts.  
au-24El Paso District, Los Angeles County,  
MINING AGENCY.  
C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines, for a reasonable consideration.

LETTERS OF ENQUIRY, containing Revenue or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to.

The subscriber has a carefully prepared map, (and specimens,) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to J. Barnett, Esq., 425 Davis St., San Francisco Cal.  
El Paso, June 21, 1883. C. W. TAPPAN.  
au31

## MINING &amp; SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES

A new volume of this extensively circulated paper commenced Sept. 11, 1882. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits together with several original engravings, of new inventions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to this purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietors having had great experience as Patent Agents, together with facilities at Washington that enable them to obtain Patent with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefitted by its personal, as its columns will from time to time contain original engravings of new machines and inventions, together with large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## To Chemists, Architects and Millwrights.

This Journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers:—Four Dollars per annum

## Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER & SMITH, Publishers,  
Room 57, Government House, Corner of Washington and Sansome streets, San Francisco.



valuable  
upon our  
the  
ers



W. B. EWER, EDITOR. } A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC. } EWER & SMITH, PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, OCTOBER 12, 1863. NO. 50.

**REMOVAL.**

The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing more room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.

**THE STATE FAIR.**

The State Fair, at Sacramento, although not all that could be desired, and much inferior to others which have preceded it, was nevertheless quite creditable to the State. Ill health prevented our being able to give it that personal attention which we should have been pleased to have done. The two or three hours we were able to remain in the Pavilion was devoted mainly to examining minerals and machinery, and of them only can we speak.

The display of minerals was quite extensive, but the total lack of classification and the unfavorable light in which most of them was displayed, rendered any extended or careful examination of them quite impossible. The number was very large, and many of them were very rich. There were about 200 entries, embracing several thousand specimens, including gold, silver, copper, lead, tin, cinnabar, coal, gypsum, soapstone, building stone, sulphur, salt, etc. The sight of this department alone, was well worth a visit to the Pavilion.

The district and region of Virginia City, although the headquarters of mining, was but poorly represented. We noticed specimens from only the Ophir, Mexican, Savage, El Cajet and Yellow Jacket.

Esmeralda was much better represented. She exhibited gold, silver, copper and tin. The tin ore from the Hawk Creek lode attracted considerable attention. Some twenty-five of the principal mines of this district were represented. Humboldt was represented by samples from fifty or sixty of her mines, among which we particularly noticed, one in charge of Mr. T. L. Wilson, several of which—as the Wilson, Ferguson, Wallace, Miami, Monitor and Ophir—were beautiful specimens of bromide, a very valuable and rare ore of silver. Mr. W. also exhibited fine specimens of chlorid of silver.

Reese River, was probably the most fully represented of any single district. The ores of this region were chiefly in charge of Mr. G. F. Semler, who had on exhibition, as we understand, specimens from 180 different claims, collected from a portion of country ninety miles north and sixty miles south of Austin. Among them were quite a number of specimens of chlorid of silver, which had been subjected to the action of heat, the effect of which is to condense the silver in little globules and flakes upon the surface of the rock. The exhibition of these specimens would have been much more useful and satisfactory, if the exhibitor had placed similar and mineral specimens by the side of those which had been subjected to the action of fire. The light, also, in which the

most of the Reese River specimens were placed was extremely unfavorable.

A large number of specimens of gold and silver were on exhibition from various parts of California, some very rich and beautiful, but we were unable to take the necessary notes to particularize them as they deserve, which we much regret.

The exhibition of copper ores formed a prominent portion in the mineralogical display. Ores were exhibited from Calaveras, Sacramento, Amador, El Dorado, Placer, Nevada, Shasta, Plumas and Del Norte counties. Some of the ores were very superior and in every variety in which this mineral occurs. We regret our inability to particularize.

No better opportunity is offered to our miners to bring to the attention of persons from various parts, the value and importance of their mines, than such an exhibition as that presented at the State Fair. People from all parts of the State assemble there at that time, to witness and compare the wonderful production of our skill, our soil and our mines. It is to be hoped that the experiment so auspiciously made to connect a mineral with the agricultural exhibition of our State, will be more fully and perfectly carried out another year. More attention should be paid to arranging and classifying specimens, and much valuable information might also be disseminated by a fuller system of labeling, so that persons unacquainted with the peculiarities of minerals might there be able to associate, to a greater or less extent, the name and character of minerals with their appearance. As it was, the exhibition could not be equalled by any other country on the globe.

**MACHINERY.**

The exhibition of Varney's Amalgamator, in practical operation attracted considerable attention—and many were enabled to see for the first time, the operation of amalgamating gold by machinery. We have fully described and illustrated this valuable invention in a former number of the Press. Mr. J. Cammann, also, exhibited a model of a new amalgamator for which letter patent have been applied through this office. This machine is quite novel in its construction, and works upon an entirely new principle from any hitherto made. We shall soon give a full illustrated description of this machine.

Mr. Elisha Hughes exhibited his patent Eyeless Screw Pick, which he is about introducing to the mining public. This pick has attained a combination of three important principles—strength, durability and convenience. It is quite novel in its construction. Mr. H. has made preparation for their manufacture on a large scale, in this city. When his works are fairly under way we shall give a full description of the instrument.

Mr. H. also exhibited a very useful and ingenious blasting apparatus, which he has recently patented. This apparatus will also be fully described in a subsequent number. It is something, which should be employed by every miner engaged in any kind of blasting.

Another invention which appeared to attract much interest, was a "tire-upsetter" invented and exhibited by Ira D. Card, of this city. It is the *ne plus ultra* of its kind and must soon come into general use. The patent for this machine was obtained through the Soliciting Agency connected

with this paper. An illustrated description of this machine will soon be furnished in our columns.

Several other useful and ingenious machines were exhibited, which we were unable to examine for reasons already stated. San Francisco was fully represented in the mechanical department of the exhibition.

**The Soledad Copper Mines—Los Angeles County.**

The rapid development of these mines and the great influx of labor, indicate a prosperity that is almost unparalleled and unsurpassed by any other copper mining region on the Pacific coast. They are situated about 30 miles from Los Angeles, in a direct line north-east. By the present circuitous road, through the San Francisco pass, the distance is computed at 60 miles. By making a road across the mountains, to the foot of which there is easy access from Los Angeles, some 30 miles would be lessened, saving of course one half the present expense of transportation, etc. The cost of constructing such road is estimated at \$20,000.

The town of the district is called Rasenna City, and lies in a cañon between the mountains, which run in a direction nearly north and south. The mines are situated on the western slope, the principal ones bearing north.

Copper was first discovered in this region some eight years ago, by a Frenchman named Maris, who, however, failed to follow up the advantage of his discovery; and it is only about eighteen months ago, that a mining camp was formed and the district fairly prospected. Since then, remarkable progress has been made.

The climate of this region is very salubrious. Wood is in abundance at a short distance, and easily obtained. The water is of excellent quality, and is amply sufficient in quantity for mining purposes the year round.

The ores generally, from this district, exhibit a remarkable degree of purity, being almost entirely free from admixture with baser metals; they consist chiefly of red and black oxides, accompanied in many cases by the gray and yellow sulphurets.

There has lately been discovered a quartz lead in this vicinity, which exhibits very richly in gold. Of this I shall write further as developments are made. Among the principal mines may be mentioned the Maris lead—this forms a portion of the property of the Soledad Copper Hill Co. A shaft has been sunk to the depth of 95 feet, and the ledge is now over seven feet in width. Grey sulphurets predominate with a large admixture of gold and silver.

The Jesus Maria lead also belongs to the above Company and is located in Soledad Hill. A lode of some four feet in width has been struck. The depth of shaft at present, is about 25 feet, with improving prospects. The prominent ores are gray sulphurets with a considerable portion of silver.

The Margarita, in the same district is being pushed forward with great vigor. The present depth of the shaft is 65 feet, and it is confidently expected that 35 feet more will give excellent pay rock; the ores from the mine are principally the purple or peacock species, merging into the gray and yellow sulphurets. This lead is undoubtedly one of the largest, richest and most reliable in the district.

I may reiterate that the general advantages of these mines in purity and yield of precious metals, are unsurpassed by any region on the Pacific Coast.  
C. W.  
LOS ANGELES, SEPT. 20, 1863.



(From our Traveling Correspondent.)

STOCKTON, OCTOBER 5, 1863.

MR. EDITOR:—In completing my report of the Stockton Fair, I must notice some articles on exhibition unintentionally omitted in my last letter, but which, as matters of public interest, I promised to mention.

On referring to my notes, I find I made a mistake concerning the huge block of copper ore from the Keystone claim, which I am desirous of correcting. This splendid sample, both as regards its size and quality, lay immediately under those of the Napoleon, when I took my notes; and, being then without a label, I necessarily concluded that it belonged to their specimens. I trust the Keystone will accept this *amende honorable*, as it truthfully explains the mistake.

In the horticultural department I omitted to speak of two magnificent samples of cotton, grown in this neighborhood; one on the tulares, the other on what is called the upland. The present condition of America has shown the immense importance of raising cotton in California, and these samples, I take it, settles the question. They are admitted by all acquainted with raising cotton to be equal to any produced by the oldest and best cotton States, both in quantity and quality. If any superiority should be claimed for either sample, it was that from the tulare ground, the cotton was more silky and fine. What a vast field is thus opened to California enterprise! Such portions of the tulares as are reclaimed, we know, produce the finest vegetables in the world, and now it is demonstrated that they will produce the best cotton. With this fact before us, surely the Government ought to redouble its efforts to reclaim these millions of idle acres; and make them, what they are capable of being made, the great cotton fields of the world. The sample from the tulares was raised by Mr. Paige, the other by Mr. Starkweather. The next article of home manufacture, comparing favorably with those imported, was a box of prunes admirably packed, by West & Brothers. They laid side by side with the best imported samples, and it was difficult, if not impossible to tell the difference. If any thing, the California samples were the larger and more pulpy. All they lacked was the rich glossy black of the foreign article and that every lady knows comes in time.

In speaking of different articles sent by the more prominent cities of the State, I omitted to do justice to the Pacific Glass Works of San Francisco. They had every variety of glass present of the highest order of merit. Their exhibition attracted much notice and praise. You will see by the published report, they and our friends, Messrs. Taylor & Co., paper manufacturers, each took special premiums. Knowing personally, the liberal and generous character of the latter firm, I took the liberty of speaking of them as they deserve, and I sincerely congratulate them upon the honorable notice their samples of paper received here.

With this, closes my account of the prominent articles on exhibition. I am happy to say the Stockton Fair has been entirely successful in every respect. The greatest justice and liberality were shown by the judges, and the fact of being a certain person, or coming from a certain place, was not the basis of their judgement of the merit of articles exhibited. The consequence is, their decisions have given universal satisfaction, because they are felt to be just. The entire receipts ranged somewhere about \$10,000, of which \$6,000 will go to the credit of the Society. At the same time, nothing could be more cordial or polite, than the attentions paid to members of the Press. To Dr. Holden my acknowledgments are especially due. In this gentleman, the Society have a faithful, efficient and attentive officer. During the week, he was the recipient of two silver goblets—one from the members and officers of the society, the other from the attaches of his own establishment. Well has he earned the distinction. Our paper is also under many obligations to Mr. Barratt, of the *Beacon*, for assistance rendered in various ways.

The excellent mining interests of this section are receiving proper attention, and large fortunes have been made by different parties. Mr. C. T. Meader, who now subscribes to the Mining and Scientific Press, as all ought who would make mining a successful business, is reputed to be worth over \$1,000,000—his interest in the Union ledge, the only one, perhaps, in the State having no shares for sale, being estimated alone at \$600,000. But of this branch of local wealth I shall speak more fully as I extend my travels. I must, however, here acknowledge the obligations I am under to

a brother of Mr. C. T. Meader, for many civilities in prosecuting my special mission.

The ladies declare I must not omit to say something about the Fair Ball. I beg to assure them I do not mean to do so, only I told them, I thought you would not publish what I said, as you were "not on the dance." I give you the chance of becoming popular forever; and getting all sorts of nice things should you visit these parts. Really, it was one of the most agreeable parties I have attended in the State. The San Francisco system of ladies dressing in bonnets and shawls is *tabooed* here, and a full dress costume is enforced. This is only just to those who go in full dress, as well as to those giving the ball. Taken altogether, the San Joaquin ladies are good-looking, and make a splendid appearance. I understand some gentleman, connected with the Press, intends publishing an account of each dress. That is far more than I dare venture upon. All I shall say is, after careful examination, that on this occasion, the dresses were all appropriate and becoming, generally beautiful, in some cases costly. Ladies I have redeemed my promise, and remain as ever your most obedient servant. Shall I say anything about the ice-creams and chickens?

In former years we used to hear so much about abuse in the management of the insane asylum that I determined to pay it a visit. Whatever it may have been in past years, it is not so now. It would be difficult to find anywhere, a better ordered, more cleanly, and well-arranged establishment. The bedding and food were particularly good. But what a mixture of pleasure and pain it creates to visit this establishment—pain at witnessing the sad condition of its inmates—pleasure at seeing the efforts made to give them all the material comforts they can enjoy. I confess it was with anything but pleasurable emotions I mingled with this crowd of madmen; but timidity soon gave way to astonishment at the idiosyncrasy of each case, and the real harmlessness of the men themselves. Here before you are some two hundred men all living in a world of their own, and that world bounded by a single idea, upon which their minds, in this insane condition, eternally dwell, knowing nothing, feeling nothing, seeing nothing but their own particular grievance. The inmates are men of all nations, but nationality is lost in the wreck of mind. The energetic American, the phlegmatic Dutchman, the methodical Englishman, the passionate Italian, the vivacious Frenchman, the savage Indian, are there before you, but the characteristics of the men are gone. Even in those cases, where they have become quiet and are grouped together in the yard, insanity is the most painfully oppressive sight I ever saw, or hope to see. There you have a large crowd of men in every conceivable and inconceivable attitude, some swinging, some lounging against the walls, some walking, some setting, some kneeling, some lying down. You see they are men, but that's all. With one or two exceptions not a word is spoken. The most deadly silence prevails. Every vestige of sociability is lost. They meet thus for months, perhaps for years, but every day meet and part as strangers, for each seems dead to the other, and all to live in their own sad world of one idea. Thus on walking about they never jostle or touch each other; on setting down, never crowd each other; on taking the swings, they wait until they are unoccupied; they ask nothing from each other, give nothing to each other; take no notice of each other, and as far as I could see, were men only in the capacity of moving, eating and sleeping. I had previously no idea that insanity destroyed so entirely the social nature of man; and yet, so intensely painful to behold, in other respects it is very fortunate. Were there communion of feeling or sentiment amongst the inmates of an asylum, there would necessarily be concert of action, in evil as well as good, and thus it would be impossible to govern them. Apart from the lessons of charity a man learns, the attentions from the officers he receives, and some minor material gratifications he enjoys, taken altogether, a visit to the asylum is by no means a pleasant thing.

And now, sir, I have done; but before I proceed on my journey, permit me once more, to thank the Stocktonians for their civility to me, and to bid them God-speed in all their undertakings.

LOW WATER.—The water in the mines and mining ditches throughout the State is unusually low at this time. The season is pronounced the driest one experienced since California became a State. The signs at present, however, indicate an early setting in of the Fall rains.

(From our Regular Correspondent.)

MOKEUMNE HILL, CALAVERAS COUNTY,  
OCTOBER 4, 1863.

MR. EDITOR:—Having promised to drop you a few lines for your valuable paper, I will commence by saying that our mines, the principal source of revenue of this county, continue to yield bountifully. This remark is not applicable alike to all the different localities, but to be taken in an average sense. Those localities in which the gold yield is dependent solely on the produce of surface ground, have seen, or will ultimately see, their sources refuse to yield the yellow stream; but those favored sections, where deep digging are found, have generally, an undisturbed and long future before them, and fortunately, there are many such in this county.

The untiring energy and perseverance of the miner, have as the surface claims become exhausted, developed and opened up, in our various mining districts, vast subterranean gold fields, which give remunerative employment to a vast number of workmen.

The most permanent among these discoveries is, probably, the region extending from Mokelumne Hill to the Calaveras River, along Chile Gluch, a distance of six miles. Some of the claims opened on this deep channel are among the best if not the very best in the State. The one owned by Paul, O'Neil & Co., I am informed, nets the snug little sum of one thousand dollars per month, to the share, and I believe the adjoining claims, of Lombard, Hit-or-miss and Calaveras, are nearly if not quite as good. All of the wash-dirt taken out of Paul, O'Neil & Co's and the Calaveras Tunnel Company's claims is crushed before washing, and passes from the battery into sluices, where the gold is collected. This is the only safe way to wash hard cemented, tough or clayey dirt, so as to concentrate all your gold in the sluices.

## QUARTZ MINES.

The Quartz Mining interests are duly represented in this county, but not to the same extent as in some other parts of the State. The regions about Angels, and West Point, are the places, where the most remunerative veins are worked at present. This branch of mining has not yet recovered from the shock it received in 1851 and 1852. Then everybody owned a quartz mine, and nobody knew how to work one, which is, in a great measure, the case now with copper mines. For this reason, quartz mining became unprofitable, and it has not received that share of attention, which its importance demands; and entitles it to; but it is, nevertheless, generally working its way into public favor.

While speaking of quartz, let me inform you that a company in your city has incorporated under the name of the "Leon Loto Gold and Silver Mining Company," for the purpose of working a well known quartz ledge, which is located about ten miles east of here, and which I believe, under proper management, will yield large returns to the company.

## WATER AND DITCHES.

As in prospecting and developing the mineral resources of our county, water becomes an indispensable and necessary element, let me inform you, and through you, the Mining public, that a great portion of our county is a complete network of flumes and mining ditches, and that water can be obtained at almost any place when needed for mining purposes, for about forty cents per inch. We have in the county 68 mining ditches, with a capacity of 10,000 inches, united length 583 miles, representing a cash value of \$500,000.

In my next I will speak of the copper interests of our county.

R. W. D.

CAPTURES.—The greatest capture of prisoners of war in modern history, up to the occurrence of the present war in our own land, was that made by the first Napoleon at Austerlitz, where that great conqueror took 20,000 prisoners. Gen. Grant's capture of prisoners, at Vicksburg, was, in round numbers, 31,000. Napoleon, at Austerlitz took 151 pieces of artillery. Grant, at Vicksburg, is said to have taken 238. Measure it how we may, the present War of Rebellion, exceeds in dimensions, all which have preceded it. It is the most gigantic conflict that the world ever beheld and the principles and consequence involved are fully commensurate with the magnitude of the contest.

THE Quicksilver mining company at New Almaden have now 150 men employed in extracting ores, from a depth of 500 feet.



# ASSAYS!

**Promptness and Accuracy Secured**  
BY THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,**  
(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. j13

**RIEHN, HEMME & CO.,**  
**ASSAYERS.**  
Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.  
Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO  
Messrs. F. PARROT & CO., Messrs. ALSOP & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.

CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
Assaying, also in Mineralogy and Chemistry as far as re-  
quired to become a practical Assayer.

**EXCELSIOR IRON WORKS,**  
712 Sansome street,  
Between Jackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,**  
Manufacturers of all kinds of  
Architectural and Ornamental Iron Work,  
Bank and Store Vaults, Safes, Doors, Shutters, Bal-  
cony, Area and Cemetery Railings, Gates, Stairs,  
Etc., and all kinds of Blacksmithing and Job-  
bing done with promptness, and at  
Reasonable Prices.  
Orders from the country promptly attended to.  
j13

**WILLIAM BRODIE & CO.,**  
**CALIFORNIA FOUNDRY,**  
Fremont Street, near Market, San Francisco.

**Light and Heavy Castings,**  
Of Every Description, Made to Order. Particular atten-  
tion paid to all kinds of House Work, Plain and Or-  
namental. j13

**Giffards Injectors,**  
FOR SUPPLYING BOILERS WITH FEED WATER  
Without Pumps. No Mill or Mining Company  
should be without one of these valuable instruments.  
Send for a Circular.  
DAVID STODDART, Agent.  
je22 Cor. Pine and Front Sts., San Francisco.

**PATRONIZE**  
**HOME MANUFACTURIES!!!**

**James Longshore,**  
**Trunk and Valise Manufacturer,**  
307 Sansome Street, under Tehama House. Trunks and  
Valises, Wholesale and Retail, Fine Sole Leather Trunks,  
Valises, and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
aug 8

**New Style of Ladies' Buckle!**  
**W. BOHM,**  
INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the  
construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
possesses several very important improvements over any  
other in use.

The invention having been carefully examined at the  
Patent Office, has been adjudged to be a useful improve-  
ment, and Letters Patent have been granted for 17 years.  
It excels all other buckles in  
**Usefulness, Strength and Appearance.**  
The Public is respectfully invited to call and examine  
this Buckle at the Jewelry Establishment of  
BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentee.  
Every Buckle sold, stamped "W. Bohm," will be  
guaranteed as to its Strength and Durability.  
jy 27 W. BOHM, Patentee.

**APARTMENTS.**  
FURNISHED APARTMENTS, VITE, OR WITHOUT  
Board, at 1018 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
home will do well to apply. jy8

# THE BRYAN BATTERY.

The vast interest involved in the reduction of area on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of the  
most Effective, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
class of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twenty  
years, has been set down as a failure. The Ordinary  
Stamp Battery

## ALONE STANDING THE TEST.

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

## METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed  
to combine all the improvements which the experience  
of the past has afforded. They have been

## EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

## EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ties. They are adapted to

## BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent, more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect unit—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1860, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing complete about 6,000 pounds, and  
the Five Stamp about 7,000. The Mortar Bed being  
cast in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

MANUFACTURED ONLY BY  
**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

os 125 to 136 First street, and 126 to 144

Fremont street.

I. C. E. KLEPZIG & CO.,  
**GUN MAKERS,**  
...AND...  
DEALERS IN GUN MATERIALS,  
733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.  
Gilding, and also Silver Plating, by E. Ekland. je21

**WANTED,**  
**GOLD QUARTZ SUITABLE FOR**  
**CUTTING JEWELRY,**  
BY FRONTIER A. DEVIERY,  
437 Pine street, San Francisco.

**John R. Sims,**



Oregon street, between Washington and Davis and Fron  
and Jackson streets, SAN FRANCISCO.

**Manufacturers of Fire Proof Doors and**  
Shutters, Bank Vaults, Grating, Cemetery Rail-  
ings. All orders from the interior Oregon, Washington  
Territory, Vancouver's Island, British Columbia, or any  
place on the Pacific coast, attended to with promptness  
and dispatch.

**Mr. Sims Appreciates the Past**  
liberal patronage of his friends, and trusts that he may  
continue to merit it in the future.

**For the Information of Strangers**  
he would say that he feels confident that his experi-  
ence in his particular calling is surpassed by none on  
this coast, which his superior work, sent to almost every  
town in this state, Oregon, also Victoria and the Sand-  
wich Islands, and to be seen on some of the best build-  
ings in San Francisco, fully attests. A large assortment  
of second hand shutters for sale at low rates. ap13

**LEANDER RANSOM,**  
**Civil Engineer**  
**AND**  
**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

**ALSO**  
**STATE LOCATING AGENT.**  
And as such having the sale of

**600,000 ACRES OF STATE SCHOOL**  
**LANDS,**

**At the low price of \$1.25 per Acre.**  
Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE, 328 Montgomery streets. oe7-3

**D. NORCROSS,**  
Masonic Temple, No. 6, Post Street.  
**Military Goods of all Descriptions.**  
*Navy Trimmings and Embroideries.*  
**REGALIA FOR ALL ORDERS.**  
aug 17

**FOR SALE.**  
**PATENT PRESSED RUSSIA IRON MINING PANS.**

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the  
**UNEQUALLED**  
**MONITOR COOKING STOVE**  
**Or RANGE,**  
**FOR HOTELS.**

To which we call particular attention.  
je-29 TAY, BROOKS & BACKUS.

**THE PACIFIC MONTHLY.**—This valuable  
magazine, for October, has been laid upon our  
table. In a late number of *Harper's*, the  
Editor of that magazine advises his readers  
to patronize home papers. So say we of the  
*Pacific*—patronize it.

**NEW OFFICE.**—Messrs. R. N. Berry & Co.  
look well and comfortable in their new office  
on Montgomery street. The room has been  
fitted up expressly for their use, and is the  
largest and most commodious looking office  
it the city.

**THE ACORN CROP** is very abundant this  
season, much to the delight of Diggers and  
porkers.

**G. E. MOORE,**  
**Assayer and Analytical Chemist,**  
No. 612 Sacramento Street,  
HAVING ESTABLISHED A CHEMICAL LABORATORY,  
furnished with every requisite for delicate Analytical  
work, is prepared to execute the Assay and Analysis  
of Ores, Mineral Waters, Guanos, etc., with accuracy  
and dispatch.

REFERENCES:  
Prof. J. D. Whitney, State Geologist, San Francisco.  
Alsop & Co., San Francisco.  
Sather & Church, San Francisco.  
John Purrott, San Francisco.  
D. O. Mills, Sacramento. sep14

**PEOPLE'S**  
**OPPOSITION**  
**Steamship Line!**

**Special Notice.**—The Steamers of this  
Line have been withdrawn from the Ni-  
caragua Route until further notice.

**GREAT REDUCTION IN RATES!!!**  
The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
J. H. BLETHEN.....COMMANDER  
Will be dispatch for PANAMA  
From Mission street Wharf.  
**SATURDAY, - - - - - OCTOBER 3, 1863**  
Punctually at 9 o'clock, A. M., on  
Connecting at Aspinwall, by the Panama Railroad, with  
the Splendid Steamship  
**ILLINOIS - - - - - 2500 Tons.**

The Moses Taylor, since her last trip has undergone  
the most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins enlarged, refitted and  
repainted throughout—making her accommodations equal  
to any steamer on the ocean.  
For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

**BOOK KEEPING,**  
**Penmanship**  
**AND**  
**COMMERCIAL CALCULATIONS,**  
Taught by J. S. LUTY  
**PRACTICAL ACCOUNTANT,**  
305 Montgomery Street, Corner of Pine.

**TO QUARTZ MINERS.**

**All persons interested in Mining Ma-**  
achinery are invited to call at Donahue's Foundry and  
examine my improved Amalgamator. It is unquestion-  
ably superior to anything now known for amalgamating  
Silver and Gold. It works 1000 pounds at a time, and  
will amalgamate over three tons a day. By the motion  
of the revolving muller, the pulp is drawn through its  
centre and passes under it, between the grinding sur-  
faces, to the circumference; from whence it passes again  
over the muller to the centre, through the holes and be-  
tween the grinding surfaces to the circumference; and so  
on, bringing the particles of ore again and again under the  
muller, and reducing the whole mass to an impalpable  
powder.  
No quicksilver lies between the surfaces to be ground,  
but at the circumference and centre of the pan where the  
metal must pass through it as the pulp circulates.  
A patent was granted for this Amalgamator in De-  
cember last, and all persons are again warned against  
purchasing machines made at the Miners' Foundry called  
"Wheeler's Amalgamator," as they are an infringement  
on my patent, and a suit is now pending in the U. S. Cir-  
cuit Court against the parties infringing. My Amalga-  
mators can be seen running at Donahue's Foundry, where  
all can judge of their operation and the very superior  
style in which they are being manufactured.  
sep21 THOMAS VARNEY.



## REESE RIVER CORRESPONDENCE.

AUSTIN, SEPT. 29, 1863.

ED. MINING AND SCIENTIFIC PRESS:—I have just got up from the universal mountain-fever, and have had but little time to look around me for facts, the signal feature in your enterprising journal, but such as I have, I give unto you.

I think you have already a just appreciation of the vast mineral resources of this district, and perhaps it would be superfluous to repeat them.

The rush here, is beyond precedent, and the cry is, "still they come." The accommodations do not keep pace with the demand, and many are compelled to take such quarters as would only do honor to a sheep-fold. Buildings are going up, such as they are, on every hand. We are sadly deficient in building material. All our lumber is brought from Carson, 180 miles westward, and readily sells for \$300 per thousand feet. Adobe bricks, made on the ground, sell at \$13 per thousand, and constitute the cheapest building material we have, but in the long run, may prove the most expensive. We have plenty of wood for fuel purposes, sufficient to last for some years. Stone buildings are going up as fast as workmen can be found to raise them. Teams are crowding in, loaded with merchandise, provisions and lumber, but if the rush continues unabated, we shall look for a scarcity before Spring.

I have made some personal examinations of the mines, and pronounce the ledges innumerable and exceedingly rich. So far as I have examined, the ledges are narrow but invariably improve as the depth increases.

I have seen a number, back of Austin, and the maximum do not exceed five feet. The Enterprise is down five feet, Toro 15 feet, Roderick 30 feet, Rough Diamond 10 feet; all about the same quality of rock, ledges narrow, but expected to improve as developed. Garibaldi; quartz one inch thick, but enclosed with good thick casing and promises well. Die Vernon Ledge is good, three feet wide. Depth of incline 58 feet. Morgan & Muncey, in the same locality, is down 100 feet. Ledge only eight inches but rich. Ethan Allen—tunnel 100 feet. Ledge, 18 inches wide, with good looking quartz now stripping the ledge. Manhattan Company's incline is down 30 feet—ledge from four to eight inches of good rock. They have started another tunnel, further down the hill, and have gone in 16 feet. Oregon, near the latter, is down an incline 160 feet, and have reached water. The rock looks rich, with a similar cast as the Savage. Virginia. I was much pleased with this mine, as the work is going on well. They use a flume. It is said, the Manhattan Company claim this ledge. Whether they have any just claim or not, I am unable to say. Southern Light is working an incline—ledge three feet wide. Savage Company has a shaft 45 feet in depth. Their ledge is three feet wide, containing good rock.

In the cañon, between Clifton and Austin, there are four five-stamp mills in active operation, but deficient in pans. Two more ten-stamp mills are going up—machinery on the ground. The expenses here are enormous. Let him who expects to visit this country, calculate to pay four prices for everything he orders, and bring along a surplus of the "needful," for ten to one, he will have use for it.

There is a good deal of sickness here, principally of the mountain fever type, which is manageable if taken in time. Meet it with a strong will and plenty of blue mass and you will be all right in a few days, at least, such was my experience.

Ocr. 22:—I visited the Yankee Blade district, located in a north-westerly direction from this place, about three miles distant. Of this noted ledge, I regret that I was unable to reach the best rock, now under water, but I saw some taken from the bottom of the incline, which is 75 feet deep, and it corresponded with a lot of fifty tons, now at Brook's Mill, undergoing the process of crushing, and I was informed by Mr. Brooks, himself, that it yielded \$200 per ton. About 12 feet from the water, they have commenced drifting with the ledge which is a perfectly decomposed quartz; said to be rich, but quite limited in width. The two ledges in the incline are but a few inches apart; said to have united below the water, forming a ledge six feet wide. If that is the case, their prospects are highly flattering. The prospects of this mine, have induced hundreds of adventurers to try their luck in that locality, and many are elated with the results; but how many on the other hand are disappointed, is best known

to themselves. It is seldom a man blows from the big end of the trumpet, and the public to know the facts, must wait until they are revealed by time.

The Whitlatch Company has made the first extension south and are down 12 feet.

Cicero Company have an incline thirty feet down, and are taking out good looking rock. I could not go down on account of the blasting, therefore I cannot give the width of the ledge. The claim is held at \$75 per foot, but I presume the most obstinate holder would yield to less seductive influences than these figures might offer, as man is frail, and gold is a great tempter.

Bunker Hill, said to be held by the Yankee Blade Company, is down 12 feet; ledge 20 inches wide—work suspended. The rock is about the average.

Seely Co., Pizaro ledge, down fifteen feet. Ledge five feet wide.

Golconda Tunnel Company, in San Francisco cañon, have their tunnel in 50 feet—work suspended. San Francisco cañon is about three-quarters of a mile from the Yankee Blade, in a northerly direction.

Ruby Company, located near by, has sunk an incline 50 feet, and reached water. As far down as I could go, I found the ledge 3 feet wide. I saw some splendid rock taken from below water-line. I understand this Company is being incorporated.

"VIDI."

## THE NORTHERN MINES—NEW DISCOVERIES.

The Dalles (Oregon) *Mountaineer* states that the mines east of the Cascades are now sending to the market of the world an aggregate of \$1,000,000 monthly, or \$12,000,000 per annum. This statement is probably somewhat exaggerated, although the past year has witnessed a large increase of treasure shipments from that quarter, and indications are that we may look for still further improvements in that direction. New and rich diggings are claimed to have been discovered in upper Oregon, and a party of miners, headed by the discoverer, started a few weeks ago for a more thorough prospect. The mines are known as "Sinker Creek." With regard to these mines, the Dallas *Mountaineer* gives the following:

A tradition has been current for years that some lost immigrants, in 1845, whilst wandering through the country drained by the Malheur, discovered mines where gold could be raked up by the shovel-full. At the time the discoverers were ignorant of the characteristics of gold in its native state, and accordingly they passed on, regarding the metal as worthless. A few years later, some of these men were attracted to California, and on visiting the mines there, almost their first remark was that they "knew where bushels of that kind of stuff was to be had." Since that date scarce a year has passed that did not witness the departure of companies of men who went out for the purpose of discovering the country described by the immigrants. These exploring parties have uniformly proved failures, owing, in a great measure, to the hostility of the Indians, who have resolutely refused to allow the white man to prospect their country. At last, however a party more fortunate than the rest have succeeded in finding the long lost gold field, and if reports are to be believed, the story of its richness has not been exaggerated by the original discoverers. The "prospects" show that the immigrant boy was not particularly out of the way when he used a piece of native gold as a sinker, in a country where the treasure is so plentiful that it meets the eye at every turn. Connected as this new discovery is with a tradition that has been current so long, it is not strange that it has been the occasion of great excitement.

## THE MINING SHARE MARKET.

The Mining Share Market during the last two weeks has met with material improvement, both in amount of business transacted and in the rate of shares. The Burning Moscow and Santiago have absorbed the largest amount of attention during the past week, for reasons which are fully given under their appropriate heads.

Ophir has slightly declined. The directors declared a dividend on the 6th. inst., of \$48 per foot. This stock has been unusually active for the past two weeks, having been chiefly taken on foreign account. To meet this new condition, which has been in gradual progress for some months, the Company has made arrangements, whereby its dividends will be paid in New York, by Eugene Kelly & Co., No 36 Wall street, the same day as at the Company's office in San Francisco.

Gould & Curry has declined \$50, with small sales, though freely offered. During the past ten months this Company

has divided \$1,350,000 among its stockholders, equal to \$1.022 per foot: in addition to which, besides paying current expenses, the Company has made extensive and costly improvements both at their mine and mill.

The Central still remains inactive—buyers \$2,200, holders \$2,400. It is reported that the Company has recently struck a ledge in their main shaft eleven feet in width.

Chollar which closed the week previous at \$900, b. 30, advanced during the past week to \$1,050, but finally closed at \$980.

Potosi has been enquired for at an advance of \$100 over the week previous without finding sellers. This Company has recently struck very fine ore, the best ever found in the mine. We presume, from the firmness of holders, it is found continuous.

Hale & Norcross has found buyers at \$200 over offers of the previous week. This Company is making extensive improvements at the mine, which when completed, will make it second to none in facilities for raising large quantities of ore.

Imperial and Overman have each advanced somewhat with light sales.

Sierra Nevada has been but little dealt in; opening at \$100, closing at \$95. The hoisting works of this mine were started about ten days since. The Company has done a vast amount of work within the past ten weeks.

Dany has slightly advanced, with considerable business. A new 80 horse power engine arrived at the mine, on the 30th. ult., to be used for hoisting and pumping.

Burning Moscow has been the chief speculative attraction of the week and has been largely dealt in. Sales of 701 shares are reported. Opening at \$175, it fell \$164. Accounts of a highly flattering nature having been received from the mine, it suddenly advanced to \$310 on 30 days. The ores now being taken out are said to be beyond the disputed ground, and it is anticipated that the company, with present prospects, will be able to remit \$25,000 weekly.

North American has suddenly become unusually active. Sales of 704 shares—one eighth of the mine—are reported the past week, at a somewhat fluctuating advance from \$62½ @ \$71, closing at the latter figure with a heavy market.

Buckeye has met with a large demand, at fluctuating rates, closing at an advance of \$4 over last quotations.

North Potosi is again in considerable favor with large transactions.

Baltic advanced \$10 with large transactions.

Sacramento has been dull at \$60. This mine has been consolidated with the Meredith and will hereafter be known as the Sacramento & Meredith.

Spanish No. 2, has been in request at \$45, on 30 days.

Santiago stock shortly since was considered a very good investment at \$175 per foot, has fallen to \$15. Sanborn & Co's Circular of Saturday, in alluding to this mine, says:—

"The high price was based upon the returns from the mill of over 600 tons of ore, which yielded, on an average, \$40 per ton (as good as Gold Hill). [?] This ore, the Superintendent represented as being the average of the ledge. Upon this the price advanced to \$175; and one of the Trustees, an intimate friend of the Superintendent, and who held a large interest, sold out nearly all his stock to first class operators. Later runs at several mills, only produced \$13 @ \$17 per ton. Hence the cave-in in prices; no more of the \$40 ore being forthcoming."

We refer to our usual quotations and sales of the week.

ESMERALDA.—Wide West has advanced from \$67 to \$75 in this city, with considerable demand. This Company is now running its mill on Real del Monte rock; meantime work is going on at the mine, preparatory to further facilities for getting out ore.

Pond is not quoted—there being no stock in the market. The company is actively engaged in operations at the mine, 80 men being there employed. They have now three mills employed crushing their ore—the Brodie, Union and Gregory's mill. Sixty-five tons of ore from the ground in dispute between this company and the Del Monte recently crushed at Winter's mill yielded 1,140 oz. amalgam, worth \$8,464. One hundred tons at the Brodie yielded 2,500 ounces.

## COPPER.

The copper interest manifests no abatement. Notwithstanding the fact that we have as yet but one dividend paying copper mine, (the Union,) within the State, and that an unincorporated company, there is, nevertheless, no lack of confidence in the success of many of the leading mines now in



progress of development. The rule that holds good with gold and silver, where perhaps not one in ten of the actually remunerative mines will ever pay a dividend on an investment, will also obtain with copper. Hundreds of copper mines will soon commence shipping ore, in quantities and qualities that will pay the working proprietors, but which can never advance to a standard of a unit of value per foot on Montgomery street. This class of mines, under our California system of mining, will doubtless furnish the chief aggregate of ore, which will soon swell the copper yield of this State to a primary importance among the productions of the Pacific Coast.

Dividend paying copper mines will come into existence, slowly, and only under a most careful, thorough and economical system of development. Washoe has been now four years in progress of development, and can show as yet, but about 4,500 feet of dividend paying ground. Yet what Californian can be found without the fullest confidence in that as one of the richest mineral regions on the globe? If we add to the list only two or three dividend paying mines per year, Washoe will still continue to retain her pre-eminence as a mining region, and increase rapidly in population and wealth.

Shipments of copper ore are still coming in. A late number of the Grass Valley National predicts that at least twenty-five copper claims situated within fifteen miles of Grass Valley, will be shipping ore before the first of next November. If the conditions of the roads are such that ore can be hauled in January, our own knowledge of the mines in that vicinity would lead us to believe that the National's prediction will be verified by that time surely—perhaps before. We have but little doubt but that shipping ore, in considerable quantity, will find its way into this city or Antioch from one hundred mines by the opening of the coming Spring. Nearly, if not quite all of this ore will pay expenses of mining and shipping; yet we do not expect to count more than a dozen dividend paying mines within the coming twelve months.

## SALES FOR THE WEEK ENDING OCT. 3, 1863.

	Shares	Per Value	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Latest Asking Price
Ophir.....	208	Shares	\$2010	@	\$2150	per foot			
Falls of Clyde.....	"	"	"	"	"	"	"	"	"
Great Western Tun.....	"	"	"	"	"	"	"	"	"
Josephine.....	180	"	11 @ 15	"	"	"	"	"	"
Coso.....	"	"	"	"	"	"	"	"	"
Dorland & Curry.....	20	"	4700 @ 4750	"	"	"	"	"	"
Savage.....	"	"	"	"	"	"	"	"	"
Chollar.....	78	"	980 @ 1050	"	"	"	"	"	"
Pride of Washoe.....	"	"	"	"	"	"	"	"	"
Bullion.....	19	"	57½ @ 60	"	"	"	"	"	"
Esmeralda.....	45	"	19 @ 20	"	"	"	"	"	"
Laurel Hill.....	50	"	2½	"	"	"	"	"	"
Willow Consol.....	"	"	"	"	"	"	"	"	"
Branch Mint.....	"	"	"	"	"	"	"	"	"
Die Veruon.....	35	"	26	"	"	"	"	"	"
United Cosmopol.....	"	"	"	"	"	"	"	"	"
Union, G. H.....	60	"	45	"	"	"	"	"	"
Union, R. D.....	200	"	2 87	"	"	"	"	"	"
Rhode's Diggins.....	10	"	12	"	"	"	"	"	"
Male & Norcross.....	2	"	1,700	"	"	"	"	"	"
Uncle Sam.....	152	"	90 @ 165	"	"	"	"	"	"
Leho.....	"	"	"	"	"	"	"	"	"
Patric.....	187	"	41 @ 55	"	"	"	"	"	"
El Dorado.....	100	"	70 @ 80	"	"	"	"	"	"
North Potosi.....	200	"	40 @ 50	"	"	"	"	"	"
Caledonia Tun. Co.....	38	"	27½ @ 37½	"	"	"	"	"	"
Independent, G. H.....	"	"	"	"	"	"	"	"	"
Silver Hill.....	"	"	"	"	"	"	"	"	"
Maribaldi.....	"	"	"	"	"	"	"	"	"
Bodie Bluff.....	"	"	"	"	"	"	"	"	"
Willow Springs.....	60	"	6	"	"	"	"	"	"
Sheba.....	60	"	80 @ 90	"	"	"	"	"	"
De Soto.....	"	"	"	"	"	"	"	"	"
Monte Christo.....	"	"	"	"	"	"	"	"	"
Wardsall.....	"	"	"	"	"	"	"	"	"
Job Black.....	"	"	"	"	"	"	"	"	"
Schattucup.....	"	"	"	"	"	"	"	"	"
Apoleon.....	"	"	"	"	"	"	"	"	"
Howes.....	"	"	"	"	"	"	"	"	"
Potosi.....	"	"	"	"	"	"	"	"	"
Yellow Jacket.....	20	"	200	"	"	"	"	"	"
Imperial.....	38	"	480 @ 580	"	"	"	"	"	"
German.....	"	"	"	"	"	"	"	"	"
St & Belcher.....	35	"	97½ @ 105	"	"	"	"	"	"
erra Nevada.....	204	"	95 @ 110	"	"	"	"	"	"
ney.....	701	"	164 @ 310	"	"	"	"	"	"
arning Moscow.....	123	"	12 @ 12½	"	"	"	"	"	"
Charles Caney.....	21	"	33 @ 36	"	"	"	"	"	"
ltimore American.....	704	"	55 @ 77½	"	"	"	"	"	"
orth American.....	"	"	"	"	"	"	"	"	"
illion (G. H.).....	"	"	"	"	"	"	"	"	"
ide of the West.....	27½	"	50 @ 60	"	"	"	"	"	"
anish No 2.....	70	"	41 @ 47½	"	"	"	"	"	"

Norton.....	50	"	6¾ @ 7	"	"	"	"	"	"
Bu side.....	105	"	7½ @ 9	"	"	"	"	"	"
Adriatic.....	"	"	"	"	"	"	"	"	"
Iowa.....	"	"	"	"	"	"	"	"	"
Madison.....	119	"	15 @ 20	"	"	"	"	"	"
Buckeye.....	402	"	20 @ 29	"	"	"	"	"	"
Lucerne.....	15	"	22 @ 24	"	"	"	"	"	"
Lady Bryan.....	100	"	6½	"	"	"	"	"	"
Mt. Davidson.....	245	"	2 @ 5	"	"	"	"	"	"
Cedar Hill Tunnel.....	"	"	"	"	"	"	"	"	"
North Ophir.....	"	"	"	"	"	"	"	"	"
Wide West.....	89	"	67 @ 75	"	"	"	"	"	"
Real Del Monte.....	"	"	"	"	"	"	"	"	"
Utah.....	12	"	45 @ 60	"	"	"	"	"	"
Pond.....	"	"	"	"	"	"	"	"	"
Grass Valley.....	"	"	"	"	"	"	"	"	"
Michigan, G. H.....	150	"	45 @ 50	"	"	"	"	"	"
Ural.....	"	"	"	"	"	"	"	"	"
Bodie No 2.....	"	"	"	"	"	"	"	"	"
Blue Ledge.....	"	"	"	"	"	"	"	"	"
Napoleon, Copper.....	"	"	"	"	"	"	"	"	"
Oncida.....	"	"	"	"	"	"	"	"	"
St. George.....	"	"	"	"	"	"	"	"	"
Sacramento.....	5	"	60	"	"	"	"	"	"
Governor Nye.....	50	"	4	"	"	"	"	"	"
Falls of Clyde.....	10	"	4	"	"	"	"	"	"
Table Mountain Cop.....	30	"	30 @ 35	"	"	"	"	"	"
Diamond, R. R.....	25	"	9	"	"	"	"	"	"
Josephine, Copper.....	60	"	6	"	"	"	"	"	"
Melones.....	90	"	80 @ 100	"	"	"	"	"	"
La Crosse.....	55	"	25 @ 32½	"	"	"	"	"	"
Harrison, Vir. Dis.....	10	"	47½	"	"	"	"	"	"

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending Oct. 3, 1863.

Names of Companies	Shares per ft	Par Value	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Latest Asking Price
WASHOE STOCKS									
Ophir.....	12	3300	2100	2125	2150	2050	1950	2000	2050
Grind & Curry.....	4	500	4150	4600	4600	4700	4700	4600	4700
Savage.....	1	1	800	800	800	800	800	800	800
Chollar.....	4	300	910	975	950	875	850	1000	1000
Potosi.....	2	500	1225	1300	1350	1325	1200	1500	1500
Hale & Norcross.....	2	500	1700	1700	1700	1700	1700	1700	1700
Sierra Nevada.....	1	500	100	100	100	95	90	91	102
Dansey.....	4	500	98	92½	95	100	100	100	102
Burnside Moscow.....	2	100	182	185	185	192	200	235	250
North Potosi.....	1	300	40	41½	43	40	40	43	47
Meredith.....	12	125	125	125	125	125	125	125	125
Charles Caney.....	1	30	12½	12½	12½	12	11½	10½	15
Sacramento.....	1	500	60	60	60	60	60	60	60
Iowa.....	1	1	75	75	70	70	72	71	75
El Dorado.....	1	1	6	6	6	6	4½	4	4
Norton.....	1	1	7	8	7½	8	8½	8½	10
Burnside.....	1	1	2½	2	2½	2	2	2	2
Adriatic.....	1	1	50	50	50	50	40	40	55
Brennus.....	1	1	50	50	50	50	40	40	55
Pride of the West.....	1	1	400	400	400	400	400	400	400
G. H. Quarz M. Co.....	1	1	1	1	1	1	1	1	1
Imperial.....	1	100	1	1	1	1	1	1	1
Conar Hill Tunnel.....	1	200	2	3	3½	4½	4½	2	2
Mount Davidson.....	12	300	2	3	3½	4½	4½	2	2
Central.....	12	300	2	3	3½	4½	4½	2	2
California.....	12	300	2	3	3½	4½	4½	2	2
Rogers, F. D.....	1	250	2	3	3½	4½	4½	2	2
Lucerne.....	1	100	2	3	3½	4½	4½	2	2
Lady Bryan.....	1	500	2	3	3½	4½	4½	2	2
La Crosse.....	1	1	2	3	3½	4½	4½	2	2
Moss.....	1	1	2	3	3½	4½	4½	2	2
Parier.....	1	1	2	3	3½	4½	4½	2	2
Crown Point.....	1	1000	2	3	3½	4½	4½	2	2
Manhattan.....	1	1	2	3	3½	4½	4½	2	2
Hudson.....	1	1	2	3	3½	4½	4½	2	2
Lady Ellen.....	1	1	2	3	3½	4½	4½	2	2
Schiller.....	1	1	2	3	3½	4½	4½	2	2
Seneca.....	1	1	2	3	3½	4½	4½	2	2
Yonvick.....	1	1	2	3	3½	4½	4½	2	2
ESMERALDA STOCKS									
Wide West.....	1	600	67	70	70	70	70	67½	72
Antelope.....	1	500	19	15	10	150	140	120	100
Esmeralda.....	1	1000	19	15	10	150	140	120	100
Real Del Monte.....	1	400	400	400	400	400	400	400	400
Utah.....	1	250	42½	45	60	50	55	52½	67
Silver Hill.....	1	500	12½	12½	12½	12½	12½	12½	12½
Nevada.....	1	250	12½	12½	12½	12½	12½	12½	12½
Federal Hope.....	1	1	1	1	1	1	1	1	1
South Utah.....	1	1	1	1	1	1	1	1	1
Jenny Lind.....	1	1	1	1	1	1	1	1	1
Falls of Clyde.....	1	1	1	1	1	1	1	1	1
Sanbeam, S. W. ex.....	1	1	1	1	1	1	1	1	1
Bamboo.....	1	500	1	1	1	1	1	1	1
Great West Tun.....	1	1	1	1	1	1	1	1	1
Burlington.....	1	1	1	1	1	1	1	1	1
El Paso.....	1	1	1	1	1	1	1	1	1
Crockett.....	1	1	12½	10	25	20	25	25	25
Etua.....	1	100	1	1	1	1	1	1	1
COSO STOCKS									
Josephine.....	2	250	9	6	10	10	14	10	13
Willow Springs.....	1	100	1	1	1	1	4	6½	8
Empire.....	1	1	1	1	1	1	1	1	1
Coso.....	1	600	1	1	1	1	1	1	1
MEXICAN MINES									
Mina Prieta.....	1	1000	1	1	1	1	1	1	1
Dios Padre.....	1	1	1	1	1	1	1	1	1
COPPER STOCKS									
Napoleon.....	1	600	4½	6	6	72½	70	70	80
Josephine.....	1	1	4½	6	6	4½	5	5	9
CALIFORNIA STOCKS									
Laurel Hill.....	1	1	2½	3	2½	2½	2½	3	3
Rhodes Diggins.....	1	1	12	12	12	12	12	12	12
Eureka.....	1	1	12	12	12	12	12	12	12
Fellowes.....	1	1	12	12	12	12	12	12	12
Rock River.....	1	1	12	12	12	12	12	12	12
Utah.....	1	1	12	12	12	12	12	12	12
HUMBOLDT STOCKS									
De Soto.....	1	1	18	18	18	18	18	18	18
Great Basin.....	1	1	18	18	18	18	18	18	18

## VIRGINIA CITY STOCK LIST.



**FIREMEN ATTENTION!** In our advertising columns will be found a card for Mr. J. D. P. Wilkins, of Stockton, the celebrated harness maker. Mr. W's hose, has long been used by the Fire Companies of San Francisco, and we believe, gives entire satisfaction. There is no doubt, it is a very superior article; and, we cordially recommend it to our numerous friends of the Fire Brigade of this city.

**PATENT CLAIMS.**—We will furnish, on application, the claim of any invention that has been patented within the last fourteen years. The name of the patentee—date of patent, when known, and two dollars for copying should be sent.

**MODELS.**—Inventors will please attach to all models sent to us, their names and address, in a legible, permanent form, this will avoid confusion and prevent errors.

**DRAWINGS.**—We have highly talented and efficient Draughtsmen, by whom drawings of every description are executed in the best style of art, with promptitude, and at a moderate cost.

#### WANTED

By a competent person, the Secretaryship of four Mining Companies. Books to be kept at the Office of the Mining and Scientific Press, No 57 Government House. Enquire as above. oct5

#### AGENTS WANTED.

We want a good Agent in every city, town and settlement, on this Coast. Applicants will send their names with reference, when specimen numbers of the Mining and Scientific Press will be forwarded to them, and their names added to our published "List of Agents." EWER & SMITH.

#### PARTNER WANTED.

The Proprietor of one of the oldest and most profitable country newspapers in the State is desirous of taking in a partner. He wants to dispose of one-half of his office to some gentleman well calculated to take charge of the editorial department, as he is a practical printer himself. For further particulars enquire at this office. oct4

#### MINING LAWS AND FORMS

**JUST PUBLISHED BY H. H. BANCROFT & CO.,** being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Cogdon. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. sept4

#### R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,  
DO  
**JOB TURNING & SCROLL SAWING.**

#### BRACKETS,

**RED WOOD BALUSTERS,  
NEWEL AND CEDAR BALUSTERS  
for Stairs.**

**Manufacturers of every description of Oval,  
Circular and Square  
PICTURE & LOOKING GLASS FRAMES  
For the Trade at New York Prices.**

#### All kinds of Designs for Building.

R. W. MYERS. H. C. SOMES

#### R. W. FISHBOURNE,

**PRACTICAL LITHOGRAPHER,  
ENGRAVER AND PRINTER,**

No. 529 CLAY St., CORNER OF LEIDSDORFF,  
San Francisco. State and County Bonds, Stock  
Certificates, Bills of Exchange, Bills of Lading, Bank  
Checks, Landscapes, Architectural and Marine Views,  
Show Cards, Labels, Etc., executed with neatness and  
dispatch. N. B. All orders in Crayon Work promptly  
attended to.

#### MINING.

N. B. Mining Stock Certificates executed with promptness and dispatch, and at greatly reduced rates. jy6

#### MYERS & DAGGETT'S

**Mining and Stock Exchange,**  
No. 23½ B Street, Virginia City, N. T.

**Mining Stocks of All Kinds Bought & Sold.**

Business connected with Mining Stocks of every description promptly and confidentially attended to.

\* Abstracts of Titles Furnished, Etc.

#### GENERAL NOTICES.



#### DR. H. AUSTIN, DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcure (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

#### DESKS

AND

**Office Furniture,  
OF ALL KINDS.....FOR SALE BY**

**JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBING, of all kinds, attended to.

#### SQUARZA'S PUNCH.

#### FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

#### ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1863

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

#### CHARLES GEDDES, ARCHITECT,

Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms,

ly 20 San Francisco

#### FREDERICK MANSELL, MECHANICAL & ARCHITECTURAL DRAUGHTSMAN,

No. 423 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

#### New Patent Agency.

**WE HAVE CONNECTED WITH THE**  
Publication of the "Mining and Scientific Press"

#### The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

#### Mining and Scientific Press Agency

The most desirable place to make application for Letters Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room

No. 57, Government House, corner of Washington and

Sansome streets, San Francisco. EWER & SMITH.

#### FOREIGN PATENTS OBTAINED

By application at this office, Room 57 Government House, EWER & SMITH, Solicitors.

#### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

#### PATENT RIGHTS.

**Patent Rights Bought and Sold,**  
At the office of the "Mining and Scientific Press" Agency  
EWER & SMITH.

#### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their Inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

#### Offices To Let,

In the Government House, Corner of Washington and Sansome Streets. Two large suits of Offices, the most commodious and accessible in the city.

C. A. CRANE, Proprietor

#### GENERAL NOTICES.

#### HAYNES & LAWTON,

IMPORTERS AND DEALERS IN

#### CROCKERY,

GLASS WARE,

#### FRENCH CHINA,

Coal Oil Lamps, Table Cutlery

#### CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCHANT,]

SAN FRANCISCO.

#### WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. 2016-1f ZENAS WHEELER.

#### Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,  
CARPETS, DUCK, ETC.,**

Cor. Front and Sacramento streets,  
SAN FRANCISCO.

#### REMOVAL.

**OFFICE OF THE PACIFIC METAL**  
Surgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.

COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent.

509 Sacramento street, near Sansome.

#### NATHANIEL GRAY,

**General Furnishing Undertaker,**

641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

GEO. A. METCALF.

D. S. HUTCHINSON.

#### METCALF & HUTCHINSON'S

**PHOTOGRAPHIC GALLERY,**

650 Washington st. Three doors below  
Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

#### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

#### \$3. Per Dozen!

Large sized Photographs \$3—Extra copies \$1 each.  
AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

#### HOTELS.

#### International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

#### FIRE-PROOF BRICK BUILDING.

Most convenient to the  
Steamer's Landing, Business etc. & Places of Amusement  
**OPEN ALL NIGHT.**

City Railroad Cars Pass the Door.  
**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop  
Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International all offers to guests the greatest number and

#### BEST FURNISHED FAMILY ROOMS;

and sets as good a TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

#### Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY** advantages to the traveler for convenience. It only half a block from the Post Office and Custom House and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles.

WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate by the day, meal or week. WE SOLICIT A CALL FROM ALL.

F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

#### THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts  
SAN FRANCISCO.

H. T. FELTON - - - W. C. MINO  
PROPRIETORS.

The above House is a Fire-proof building, with Grand Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

**The Rooms are handsomely furnished** supplied with Patent Spring Beds, and Hair, Mattresses affording very superior accommodations for families single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance the Steamers to convey passengers and their baggage to the House Free of Charge.

The House is open all night.

#### P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY**  
line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

#### FOR PANAMA.

The following Steamships will be dispatched in month of September, 1863.

Sept. 13th, - - - Steamer Orizaba

Sept., 23d, - - - Steamer Golden Age

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.  
and connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent

je4 Corner of Sacramento and Leidsdorff st



FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

SECRETARIES! ARE YOUR ASSESSMENTS

**REYNOLDS' Patent Cut-Off and Governor, FOR STEAM ENGINES.**

127 of these Invaluable Machines, ARE NOW IN USE in California and Nevada Territory, giving a perfectly regular motion and Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor** is the CHEAPEST, SIMPLEST and QUICKEST to set and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

**Clark's Steam and Fire Regulator,** For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

**Ingersoll's Patent Drill Press,** With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

**Felt for Steam Boilers, Pipes, Etc.** At the lowest market rates.

**Steam Engines, Boilers, Pipes,** Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

**Anti Incrustation Powder,** Save Remedily for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years. Refer to—Sugar Refinery, San Francisco, Cottrell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States. **E. T. STEEN AGENT.** No. 33 Fremont Street, San Francisco.

**MOYNIHAN & AITKEN, Boiler Makers and Blacksmiths,** Mission, between Beal & Fremont Sts., San Francisco.

**N. B.** All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms.

**PUMPS!**

**HARRISON'S California Lift and Force Pump,** WITHOUT VALVES OR PACKING, Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

**ALL SIZES;** Capable of throwing from ONE HUNDRED to FIVE THOUSAND Gallons per Minute—For sale by

**C. H. HARRISON, PHOENIX OIL WORKS,** 617 Front Street, San Francisco.

**50 lbs. MARINE and Fire-Proof Paint,**

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, iron ground. Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks of Bottoms of Ships, it is equal to a coat of Stone, and will equal to Copper, no worms will ever effect it, and cheaper than any other paint.

**DIRECTIONS:** For Decks of Ships, use two parts Mineral Paint, one part White Lead, mixed with Linseed Oil. For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply hot. For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.** When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:** HOUSE—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: If a lighter color is wanted, mix with more lead. ROOF—Five parts of Mineral Paint, one part white lead; mix with Linseed oil. Put it thick on a tin Roof, one coat when properly applied will last three years. **S. C. BRADSHAW, Agt., G. T. TORQUET, Superintendent.** **WORKS, North Beach; Office, 509 Sacramento st., San Francisco.**

**PALMER, HANSCOM & CO., GOLDEN STATE IRON WORKS,** No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds ALSO: GENUINE WHITE IRON SHOES AND DIES. PALMER, HANSCOMB & CO.

**To Quartz Miners.** **Knox's Improved AMALGAMATING PAN,** WITH PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known. By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be other wise lost. Made exclusively by PALMER, HANSCOMB & CO., GOLDEN STATE IRON WORKS, Nos. 19 & 21 First Street, San Francisco. The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. **W. A. PALMER.**

**JOHN P. GALLAGHER.....JOSEPH H. WEED, GALLAGHER & WEED, BRASS & BELL FOUNDRY AND LOCK FACTORY.** No. 125 First Street, opposite Minna, next door to Pacific Foundry, all kinds of Brass and Composition Castings and Finishing, done with neatness and dispatch.

**CHURCH AND STEAMBOAT BELLS, OF ALL SIZES** Made to order. Engineers' Gongs made and hung in the best manner. Bank, Vault, Store and Prison Locks, also brass Padlocks and Shop Locks of various patterns, on hand and made to order. **123.** Particular attention given to casting Rudder Braces and Ship Work in general. All Jobs promptly attended to.—Prices moderate. Removed from Oregon street, between Front and Davis.

**Miners' Foundry —AND— MACHINE WORKS,** First St., between Howard & Folsom, SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS MACHINERY,** the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as: Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition. \* \* \* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost. All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere. **HOWLAND, ANGEL & KING** San Francisco, February 23, 1863.

**San Francisco Machine —AND— IRON WORKS!** Northeast corner Fremont and Mission Streets.

**ALL KINDS OF MACHINERY MADE TO ORDER ON** most reasonable terms. Steam Engines, High and Low Pressure; Quartz mills, Saw mills, Mining Pumps, Hoisting machines for mining purposes, Wine Presses, Agricultural implements etc. etc., and Castings of all descriptions made to order. Steam Engines exchanged and for sale by **DEVORE, DINSMORE & CO.** REPAIRING promptly attended to. **FOR SALE.** San Francisco, July, 1863. jyl3

**VULCAN IRON WORKS COMPANY**

**P. Torquet, Manager, STEAM ENGINE BUILDERS and BOILER MAKERS,**

**Iron Founders and General Engineers,** No 137 & 139 First street, San Francisco. Pumping, Hoisting, Mining and quartz-crushing Machinery. Shoes and Dies of the hardest iron, Russia Iron Punched Screens. Steamboat Machinery: Saw, Flour and Sugar Mills. High and Low Pressure Boilers of all Styles. JOURNAL and other Turbine Water Wheels with latest improvements.

**W. T. & J. GARRATT, City Brass and Bell Founders.** Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and H and Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, iron steam pipe furnished with fittings, &c.; COUPLING JOINTS OF ALL SIZES. Manufacturers of "Gar ratt's Patent Improved Journal Metal."**

**D. MORRIS, MACHINE SHOP,** 227 Market, corner of Beale Street.

**Manufacturer of WARRANTED FIRE-PROOF SAFES** Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. jcl3

**LEWIS COFFEY AND RISDON, STEAM BOILER AND SHEET IRON WORKS.** The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality. Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal. **LEWIS COFFEY J. N. RISDON.**

**THEODOR KALLENBERG Maker of Models FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, &c.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. No. 418 Market street, San Francisco. 17.3m**

**HIRAM WRIGHT, PICK MAKER,** Has established a Manufactory for the Making of MINER'S PICKS, at NO 121 BUSH STREET, SAN FRANCISCO, [Between Sansome and Battery.]

WHERE can be had a superior Pick for Miners use As he manufactures all his picks under his own personal supervision, he warrants them as being made of the best material and by the best workmanship. Orders attended to and filled promptly and with dispatch. aug17

**WRIGHT'S PICKS.**

**JOHN WRIGHT,** of Sacramento, has established himself in San Francisco, for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eves of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. **JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.**

**CALIFORNIA TOOL WORKS! John Weichhart, Manufacturer of All Kinds of Edge Tools, Etc.,** Plane Irons Moulding Irons, Stone Cutter's Tools, etc No. 22 Fremont street, bet Market and Mission San Francisco, July 14, 1863.

**VALID? A correspondent suggests the enquiry whether advertisements of assessments are valid in which the name of the Company is not given in full: i. e. in which the district, in which their leads are located, is omitted. At present many advertisements may apply to many companies.**

**NEW FIRM IN VIRGINIA.**—We would call attention to the card of MESSRS. ARMSTRONG & WILDER, of Virginia City, which will be found in another column. A long, personal acquaintance with Mr. Armstrong, warrants us in assuring our readers that whatever business is entrusted to this firm will be correctly and promptly attended to.

**THE REFUGIO MINING COMPANY.**—We have received the Prospectus of this Company recently organized for working "Nuestra Señora del Refugio" mine in Chihuahua, Mexico. We shall notice at length next week.

**RICH COPPER.**—Mr. J. T. Taylor, Postmaster at Taylor's Ranch, has submitted some very rich specimens of copper ore to our inspection, from Plumas county. The "Green Ledge," located in Genesee Valley, besides being very rich in copper, also contains a large amount of gold. The rock is now being worked in arastras, which yield about \$25 to the ton. The lead is of most unmistakable value. Mr. Taylor also exhibited specimens from the Mountain Meadow ledge, which shows large quantities of native copper. This ledge also contains gold and frequently shows native silver. A tunnel is now in 300 feet which at 500 feet will strike the ledge over 500 feet in depth.

**Eye, Ear and Throat. DR. DE CASTRO, Oculist and Aurist,**

**WHO HAS PRACTISED IN NEW** York and all the principal cities of Europe with such unrivalled success, and from each place in possession of the most eminent testimonials, may now be consulted upon diseases of these delicate organs, with a view to their permanent cure. Deafness of long standing thoroughly cured. The Doctor employs his (by the Medical Society of London approved)

**Self-adjusting Artificial Tympanum,** For the relief of deafness, attended by loss or injury of the membrana tympani, and for the cure of discharge from the ear—the invention of Dr. Castro, M. D., author of "Deafness Practically Illustrated as to its Nature and Treatment," etc.

The self-adjusting Artificial Tympanum was first introduced to the notice of the profession at the meeting of the Medical Society of London, on 30th of November, 1863. An animated discussion ensued on the reading of the paper, and several members of the Society bore testimony to the success of the remedy and the importance of the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-adjusting Artificial Tympanum, as he had observed the immense benefit a young lady friend of his had received from it. She was in fact, quite deaf, and in a most miserable state; the effect of the tympanum was instantaneous—quite like a miracle. Five more testimonials from Members of the Medical College, New York, and the principal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and Kearny streets. Entrance on Market street.

**33. Mr. Editor—Having been afflicted** with deafness for the last two years, originating from a severe cold, and for the last month suffering from the most excruciating pains in my ear, I was obliged to come down to San Francisco to seek relief. After a physician's recommendation to wait on Dr. De Castro, on the corner of Kearny and Market streets, and underwent one operation, and it was with the utmost pleasure I can say my hearing was fully and without pain restored. I deem it my duty to make this known to the public, and to recommend Dr. De Castro's skill as an aurist. **JOHN REESE, Napa Valley.**

**James Callaghan, witness.** San Francisco, July 30th, 1863.

[From the Daily Alta.] San Francisco, June 30th., 1863.

**ED'S DAILY ALTA:** Permit me through your widely circulated journal, to say, that my daughter Mary Ellen has been afflicted with deafness since she was thirteen months old, and that she has been a member of the Deaf and Dumb Institute since it was organized. On taking her to Dr. De Castro, on the corner of Kearny and Market Streets, and undergoing under his direction, two operations, she has heard sounds very distinctly; and is now, I am happy to state in a fair way to get permanent relief. The result, I think, is satisfactory; and I deem this notice due to Dr. De Castro for his skill; and would recommend all parties similarly afflicted to give him a trial. My daughter has at different times been under the care of the most skillful physicians and aurists in California, but up to the period of visiting Dr. De Castro, received no benefit. **—CHAS JOHN P. WRIGHT, 812 Green Street.**



## MINING NOTICES.

**Silver Butte Consolidated Silver Mining Company.**—The regular annual meeting of the Silver Butte Consolidated Silver Mining Company will be held at the office of the Company, No 528 Montgomery street, on FRIDAY EVENING, October 30, 1863, at 7 1/2 P. M., for the election of officers for the ensuing year. A punctual attendance is requested.

By order of the Board of Trustees.

M. G. ELMORE, Secretary.  
San Francisco, September 29, 1863. oct12

**Emmet Copper Mining Company.**—Notice is hereby given that at a meeting of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No 528 Montgomery street, San Francisco, October 1, 1863, an assessment of twenty cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to T. LYONS, Superintendent, Copperopolis.

By order of the Board of Trustees.

M. G. ELMORE, Secretary.  
oct12

**Wide West Copper Mining Company, Office.** 528 Montgomery street, San Francisco September 10, 1863—Notice is hereby given that an assessment of Twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, and payable immediately in U. S. Gold Coin to the Secretary, at the office of the Company, or to J. M. PIKE, Superintendent, at Copperopolis.

By order of the Board of Trustees.

M. G. ELMORE, Secretary.  
sep14

**Bald Eagle Gold Mining Company,** Gold Flat District, Nevada County, Cal.—Notice is hereby given that an assessment of Twenty-five cents per share has this day, (September 9th, 1863,) been levied by the Board of Trustees on the Assessable Stock of the above named company, and payable immediately in United States Gold Coin to the Secretary at his office, or to T. S. SMITH, Superintendent, Grass Valley, Nevada Co. By order of the Trustees.

T. L. BIBBINS, Secretary, 105 Montgomery Street.

sep13lm

**Notice is hereby given that an Assessment of ten (10) cents per share on each and every share of the Capital Stock of the Buena Vista Gold & Silver Mining Company—Fort Pitt Ledge, Prince Royal District, Humboldt County, Nevada Territory—was this day levied, payable immediately in U. S. gold coin, to the Secretary at No 413 Montgomery street, San Francisco.**

By order of the Board of Trustees.

H. B. MINOTT, Secretary.  
September 22, 1863. sep28

## Fire Hose! Fire Hose!! Fire Hose!!!

J. P. D. WILKINS,

The celebrated HARNESSE MAKER of Stockton, makes FIRE HOSE, from the best material, and WARRANTED at a trial of the Weber Steam Engine Co., No 3, of the city of Stockton. This Hose is manufactured at its establishment, and known to stand a pressure of 125 pounds to the square inch; as certified by the Chief Engineer.

## ALSO FOR SALE,

All kinds of HARNESSE and SADDLERY, at the lowest cash prices. REPAIRING done promptly, one door west of the Main Street Stable. oct12

## Mining Shares For Sale

BY

O. A. ORANE,

Office 28 Government Block.

475 Shares U. S. Mining Company, Virginia City.

910 Shares Granada Gold and Silver Mining Company, Virginia Hill, Virginia City.

168 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.

20 Shares Mohave Mining Company, La Paz District, Colorado, N. M.

30 Shares Aspinwall Gold and Silver Mining Company, Devil's Gate District, N. T.

75 Shares Washington Copper Mining Company, Indian Bar, Tuolumne Co.

228 Shares Montezuma Gold and Silver Mining Company, Inyo District, Tulare Co.

90 Shares Owen's County Consolidated Gold and Silver Mining Company, Inyo District, Tulare Co.

50 Shares Crown Point Ravine Gold and Silver Mining Company, Virginia District, N. T.

10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California. sep28

**Utica Gold & Silver Mining Company,** Office, 528 Montgomery Street, San Francisco, Sept. 18, 1863.

Notice is hereby given, that in accordance with the laws of the State of California, and the resolutions adopted by the Board of Trustees of the Utica Gold and Silver Mining Company, Esmeralda District, there will be sold at Public Auction, at the Office of the Company of Friday October 23, 1863, at 10 o'clock A. M., so many delinquent Shares of the Capital Stock of the Utica Gold & Silver Mining Company, standing in the names of the following named persons, as will be necessary for the payment of the assessment of ten cents per share, levied June 12, 1863, and two dollars per share levied August 10, 1863, together with cost of advertisements and expense of sale, unless said assessments with accruing charges are previously paid:

Names.	Certificates.	Shares.	Amount.
L. B. Lott, No. 1,	7,	20,	42.00.
G. L. Church, " 11,	20,	20,	42.00.
G. H. Gray, " 19, 25,	40,		84.00.
J. F. Gilbert, " 27, 31, 34,	180,		360.00.
F. A. Baker, " 29, 32, 35,	180,		378.00.
G. L. Church, " 30, 33, 36,	180,		378.00.
G. L. Church, " 37, 40, 43,	180,		378.00.
Geo. Morrow, " 38, 41, 44,	180,		378.00.
J. Meyer, " 39, 42, 45,	180,		378.00.
J. Kapsner, " 47, 53, 54, 55, 56,	15,		31.00.
G. L. Church, " 62, 63,	35,		72.00.
J. Meyer, " 68,	6,		12.00.
J. Kapsner, " 69,	6,		12.00.

G. L. WALRATH, Secretary.  
San Francisco, Sept. 18, 1863. 1m

## MINING CARDS.

## OWEN'S RIVER CANAL COMPANY.

Capital Stock ..... \$1,000,000.

10,000 Shares ..... \$100 per Share.

A Portion of this Stock is not offered to the public, and recommended as an investment.

## FULL PAID AND UNASSESSABLE

Stock, also Assessable Stock, can be obtained of A. J. DOWNER & CO., the authorized Agents of the Company, 406 Montgomery street.

President.....R. S. WHIGHAM.  
Secretary.....W. FISK HIGHCHOCK.  
Treasurer.....MONTGOMERY GORDY.  
Superintendent.....WILLIAM FLEMING.  
Engineer.....J. E. CLAYTON.

## TRUSTEES.

R. S. WHIGHAM, formerly of Whigham's Mill, Nevada City.  
WILLIAM FLEMING.....of San Francisco.  
SPENCER KIDDELL.....Paying Teller of Parrott & Co's.  
ISAAC SWAIN.....of A. J. Downer & Co.  
WILLIAM P. PRATT.....of Nash & Fogg.  
Office of Company 328 Montgomery street  
28sep

JOHN ARMSTRONG.

WM. P. WILDER.

## ARMSTONG &amp; WILDER,

VIRGINIA CITY, N. T.,

SEARCHERS OF RECORDS  
for Mining Claims & Real Estate.

RELIABLE ABSTRACTS  
guaranteed at reasonable prices.  
LETTERS OF ENQUIRY  
promptly answered.

ALEXANDER STOTT,  
MINING SECRETARY,

512 Sansome Street, San Francisco.

Secretary of—

HORSE SHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

## T. C. Sanborn &amp; Co.

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

OPHIR SILVER MINING STOCK,

GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

J. F. MILLER.

W. C. COLEY.

## MILLER &amp; COLEY,

Stock Brokers & Mining Agents

327 MONTGOMERY STREET,

Between California and Pine, in Jerome Rice & Co's Real Estate Sales Rooms, San Francisco.

ALL KINDS OF STOCK AND MINING  
Business attended to with Promptness  
and Dispatch  
aug17

## L. F. LELAND,

STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2 1/2 to 3 1/2, P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

## AGENCY

For the Purchase and Sale of

## MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.

je13

WM. FAULKNER.

## New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

je-29

MORGAN, STONE & Co

108 Front Street, San Francisco.

## BUSINESS CARDS.

## Napoleon Copper Mining Company.

Capital Stock.....\$1,620,000.  
2,700 Shares—\$600 Per Share.

Length of Lend 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 3, 1862.

President.....F. MACCRELLISH  
Secretary.....R. C. ALDEN  
Treasurer.....R. G. BROWN  
Superintendent.....A. W. HASKELL

## TRUSTEES.

F. MACCRELLISH, of Alta California  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissary Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je29

THE EUROPEAN  
ORE REFINING  
COMPANY.

Quartz Mill and Furnaces, Bryant Street,  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF

## ORES AND MINERALS.

In large or small quantities, for such Experienced Treatment by the

## LATES EUROPEAN METHODS,

As may be ascertained by

## CAREFUL ANALYSIS,

At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.

33 The South Park, and Folsom and Kearny Street Cars pass Bryant street. au31

## The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF

COPPER, SILVER, TIN, NICKEL, COBALT, ZINC, LEAD, AND SULPHURETS CONTAINING GOLD. Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-4f Montgomery Street, San Francisco.

## MARTIN &amp; Co.,

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

## Purchase of Copper Ores,

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL. Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York, San Francisco.

San Francisco Post Office, Box 1259.  
je 1.

San Antonio Gold and Silver Mines,  
LOWER CALIFORNIA,

## FORWARDING &amp; MINING AGENCY.

SAMUEL SMITH,

OFFICE—North West Corner of Front and Clay Streets, San Francisco.

MINING MACHINERY AND MERCHANDISE Forwarded, Mining Claims secured, through the resident Agent at San Antonio, and information furnished regarding any claim, in that Territory, on Commission. je-28

## BUSINESS CARDS.

## SOUTH PARK

## Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO,  
Office in Shiel's Block, opposite Masonic Temple,  
je13 S. F. CLOUSER, Secretary.

## W. W. HANSCOM,

## Steam and Mechanical Engineer,

Designs furnished, and Drawings made for Engines, Mills, Water Wheels, Mining Machinery, etc., etc.,  
At Golden State Iron Works,  
ang x First Street, San Francisco.

TO MINING COMPANIES!  
Offices To Let.  
SUITES OR SINGLE ROOMS,  
in Government Block,  
N. W. Cor. of Sansome and Washington sts.  
au-24

El Paso District, Los Angeles County,  
MINING AGENCY.  
C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

LETTERS OF ENQUIRY, containing Revenue or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to.

The subscriber has a carefully prepared map, (and specimens,) of each lode in the district, a portion of many of which are for sale at very low figures. For further particulars he would refer to J. Burnett, Esq., 425 Davis St., San Francisco Cal. El Paso, June 21, 1863. C. W. TAPPAN. au31

## MINING &amp; SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings of new inventions, etc., prepared expressly for its columns. This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Mining Interest!

Will find it of great value, as it will contain all the news pertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietors having had great experience as Patent Agents, together with facilities at Washington that enable them to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its columns will from time to time contain original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

To Chemists, Architects and Millwrights. This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers.—Four Dollars per annum!

## Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

LEWIS & SMITH, Publishers,  
Room 57, Government House, Corner of Washington and Sansome streets, San Francisco.



# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI. SAN FRANCISCO, MONDAY EVENING, OCTOBER 19, 1863. NO. 51.

## MINING DIRECTORY.

Alemania, silver, Lower California, Mexico, A Marcus, 519 Montgomery street  
Ashby Stewart, copper, Garden Dist, Placer county, J H Culver, 43 L street, Sacramento  
Anglo Saxon, copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sac.  
Apollo, g and s, Reese River Mining Dist, 228 Front street  
Anderson, copper, I C Pray, 626 Merchant street.  
Admiral gold and silver, Sierra Dist, Humboldt, M M Barker, 406 Montgomery street  
Antelope Consolidation, cop, Antelope Dist, Calaveras co, M Walthall, Jr, 228 Montg. St  
Apache Chief, gold and silver, T Brownjohn, 621 Clay St.  
Aztec, G & S, Esmeralda, R Robinson, 336 Sacramento St.  
Albion, G & S, Slate Range, James Hitchings, 13 Mead House.  
Alta, G & S, Silver mountain, O Christensen, 213 Jackson St.  
Austra, gold and silver, C B Hart, 15 Metropolitan Block.  
Antelope, gold and silver, Esmeralda, J F Miller 327 Montgomery street.  
Alamo, g, s, & c, Contra Costa, Co, J W Crosley, 9 & 10 Government House.  
Adelaide Consolidated, gold and silver, Silver mountain, R Clarke, 40 Met. Block.  
Antelope Spur, silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
Alemania, silver, San Antonio L. C., L Landsberger, 519 Montgomery street.  
Albion, gold and silver, Slate Range District, W H Clark, 224 Monterey street.  
Amagoza, silver, Salt Spring District, J A Rawson, Athenaeum Building.  
Arizona, silver and copper, La Paz, Thos. Brownjohn, 621 Clay street.  
Astor, gold and silver, Gold Hill, N T, E C Lovell, 436 Jackson street.  
Atlantic, gold and silver, Pacific Ledge, L F Yates, Virginia City.  
Amer can, gold and silver, Star District, W H Martin, 617 Clay street.  
Austin, silver, Esmeralda District, R O Startevant, 428 Montgomery street.  
Annapolitan Con, silver, Esmeralda District, C E Buckingham, 607 Clay street.  
American Pioneer, silver, La Paz, New Mexico, G W Blake, 224 Montgomery street.  
Ashland, gold and silver, Virginia District, Thos. Brownjohn, 621 Clay street.  
Alta, silver, Silver City, L D Ingoldsb, 80 Merchant street.  
Alcatraz, silver, Reese River District, A S Gou d, 528 Clay street.  
Amazonia Mining Co, Reese River, R T Polk, 56 Metropolitan Block.  
Anna Smith Mining Co, Reese River, R T Polk, 56 Metropolitan Block.  
American Freeman, gold and silver, Thos. Hill, Pioneer Building.  
Ajax, gold and silver, Coso District, V B Post, Lucas & Turner's Building.  
Am. Baltimore, gold and silver, J Crocker, 413 Montgomery street.  
Atlas, gold and silver, Esmeralda District, L D Ingoldsb, 80 Merchant street.  
Alice, gold and silver, Mogul Mining District, M. L. McDonald, 34 Metropolitan Block.  
Amelia, gold and silver, Prairie District, El Dorado county, D F Verdinal, 636 Clay street.  
Alameda Coal Mining Co., Alameda County, L Franconi, Lucas & Turner's Building.  
Ashim, gold and silver, Esmeralda District, I N Choynsky, Esmeralda.  
Atwill, gold and silver, Flowry District, T Brownjohn, 621 Clay street.  
American Eagle, gold and silver, Excelsior District, Wm E Garry, 619 Merchant street.  
Atlantic, gold and silver, Monitor District, T J Owens, 1 Armory Hall.  
Astor, gold and silver, Echo Dis', Humboldt Co., Ferdinand Vassault, 4 Barron Building.  
Aurora Silver Mining co, Henry Van Pelt, 436 Montgomery street.  
Animas, silver, Durango district, Thomas Hill, Pioneer Building, Montgomery street.  
Apollo, g & s, Silver mountain district, T J Owens, 1 Armory Hall.  
Alamo, gold and silver, Silver City, J F Pope, 113 California street.  
Antelope, Silver, Esmeralda District, S Patte, 522 Montgomery street.  
Alumbra Mining Co., Devil's Gate District, J O Stranch, 815 Sansome street.  
Etna, Gold and Silver, Esmeralda District, Wm Winchester, Aurora, Mono county.  
Annie Laurie, gold and silver, Humboldt District, J H Gager, Merchant street.  
Adriatic, gold and silver, Flowery District, S B Rooney, 11 Government House.  
Albany East, gold and silver, Slate Range District, W H Clark, 522 Montgomery street.  
American, gold and silver, Virginia District, R L Taylor, 48 Metropolitan Block.  
Arcade, Esmeralda District, P B Oppenheim, Aurora, Mono county.  
Allen, g & s Virginia District, R Rising, Virginia City.  
Adriana, copper, Mineral Spring district, Calaveras county.  
Arlington, gold and silver, Humboldt, N. G. French, 426 Montgomery street.  
Aguas Calientes, gold and silver, Genoa, Henry S. Fitch, 426 Montgomery street.  
Abisal, silver, G. F. Kohler.  
Ameri an, gold and silver, Prince Royal district, Wm. Chapman.  
Abbe Faria, gold and silver, Esmeralda, G. W. Parker.  
Adams, gold and silver, Silver City, Jno. F. Pope, 105 California street.  
Atlanta, gold & silver, Devil's Gate district, M. S. Bucklew, corner of Fifth & Market Sts.  
Alba Nueva, silver, Humboldt county, Wm. Longerman.  
Aurora, silver, Lower California, Thos. Hill, Pioneer Building.  
Alta No 2, copper, Del Norte Co., F. B. Hart, corner of Montgomery & Jackson streets.  
Athens, silver, Excelsior district Mono county, O Dougherty, Front street.  
Atioch, copper, Calaveras county,

Bryan & Watson, gold and silver Lander County, W C Watson, Metropolitan Block.  
Bolivia, gold and silver, Gold Hill, N. T., N Shiverick, 605 Clay street.  
Buckeye, gold and silver, Cinnabar dist., Humboldt, G. Falkenstein, 426 Montgomery st.  
Black Mountain Copper Mining Co., Clayton Dist., R Emerson, 540 Clay street.  
Black Rock, gold, silver and copper, Contra Costa county, H C Kibbe, 542 Sac. street  
Baron Rothschild, gold, silver and copper, Contra Costa county, H C Kibbe, 542 Sac. st.  
Blumenthal gold and silver, Reese River, F H Rogers, 607 Washington street.  
Baton Rouge, silver, Reese River, D Wilder, 522 Montgomery street.  
Beverly gold and silver, Reese River, John Gorman, 423 Battery street  
Blue Ledge, g and s, Reese River Dist, 228 Front street  
Black Ledge, g and s, Reese River Dist, 228 Front street  
Baja California, silver, Lower California, Mexico, A Marcus, 519 Montgomery street  
Big Tree, Silver Mountain Dist, T J Owens, 1 Armory Hall  
Brilliant, silver, Slate Range Dist, John B Russell, 410 Montgomery street  
Bunker Hill, gold and silver, Lander county, N. T., P N Edwards, Merchant St.  
Ballion G. & S. Mining Co., Inyo Dis., David Wilder, 522 Montgomery St.  
Bright Star, silver, Reese River, R. T. Polk, 56 Metropolitan Block.  
Buckeye, gold and silver, Silver City, F S Carter, 415 Sansome street.  
Burning Moscow, si ver, Virginia District, J P Nourse, cor. Mont'y and Jackson streets.  
Benjamin, g & s, Devil's Gate District, R N Van Brant, 706 Montgomery street.  
Belfast, g & s, Devil's Gate district, J H Purkitt, 655 Washington st.  
Bullion, gold and silver, Russ District, David Wilder, 522 Montgomery street.  
Bullion, gold and silver, Van Horn Di trict, T L Bibbins, 305 Montgomery street.  
Bella Vi ta, gold and silver, Lower California, S S Sprague, cor. Cal. and Sansome.  
Burnside, silver, Virginia District, E C Lovell, 436 Jackson street.  
Banner, go d and silver, Esmeralda District, R N Van Brant, 706 Montgomery street.  
Baltic, gold and silver, Gold Hill District, W W Coryell, Virginia City.  
Best & Belcher, gold and silver, Virginia District, H E Woodruff, Gold Hill.  
Bodi Bluff C. T. & M. Co., Bodie Mini g Dis. Cal., J F Sterling, 33 Montgomery Block.  
Brennas, gold and silver Virginia District, D F Verdinal, 636 Clay street.  
Bajazette & G. Era, go d and silver, Virginia Di trict, R D Ferguson, Virginia City.  
Bamboo, gold and silver, Esmeralda District, J W Gould, 406 Montgomery street.  
Bodie No 2, gold and silver, Bodie District, Cal., A L Chamberlin, 413 Montgomery St.  
Bravton, gold and silver, Humboldt District, Wm P Denkla, 413 Montgomery street.  
Big Baby, gold and silver, Esmeralda District, E. Daniels, Express Building.  
Blue Mountain, g ld and silver, Calaveras Co., Hugo Droschfeld, 24 Naglee's Building.  
Barker, gold and silver, Am. District, H. C. J S Luty, 305 Montgomery street.  
Blue Ridge Mining Co., Slate Range District, G J Turner 606 Montgomery street.  
Buena Ventura, G. and S., Aurora, Mono Co., Wm V Garvey, 612 Merch nt street.  
Best Chm e, gold and silver, Echo Dist. Nevada T., Geo. E. Phelan, 726 Montgomery St.  
Brazor, gold and silver, Esmeralda District, T H Templeton, 550 Clay street.  
Big Chief, gold and silver, Esmeralda District, P B Cornwall 608 Merchant street.  
Blue Ledge, gold and silver, El Dorado Co., A St E Denver, Coloma.  
Bamboo Chief, gold and silver, Silver mountain Dis., T J Owens 1 Armory Hall.  
Brennas, gold and silver, Devil's Gate District, F. W. Gross, 436 Jackson street.  
Barclay & Smith Mining Co., gold & silver, Reese River, R. T. Polk, 56 Metropolitan Bk  
Brewster, gold and silver, Esmeralda, I I Pool, 540 Washington street.  
Bradley, gold and silver, Ree e River District, J I Pool, 540 Washington street.  
Butler, gold and silver, Wm E Moody, 706 Montgomery street.  
Broadhead, gold and silver, Thomas McCallan, 622 Clay street.  
Beverly Con'd copper, El Dorado Canon, J P Nourse, Lucas & Turner's Building.  
Belknan Mining Co. F W Gross, 436 Jackson street.  
Bunker Hill, gold and silver, Santa Clara District, W H Martin, 617 Clay street.  
Barr Silver Mining Company, Slate Range District, Edward Barry, 536 Sacramento St.  
Baltic Con., gold and silver, Smoky Valley, N. T.,  
Barber, gold and silver, Thos. Brownjohn, 621 Clay street.  
Ben Franklin, gold and silver, Humboldt District, Jas Herrick, 606 Montgomery street.  
Big Cañon, gold and silves, Tuolumne county, J W Gould, 406 Montgomery stree  
Barreteros Mining Co. Sinaloa, Mexico, F Vassault, 4 Bolton & Barron's Bldg.  
Black Hawk, gold and silver, Silver Hill, Thos. McCallan, 622 Clay street.  
Bonita, silver, F W Gross, 436 Jackson street.  
Blanding, gold and silver, Virginia District, Henry Toomy, 402 Montgomery street.  
Bay Copper, gold and silver, Clayton D. Con Cos S F Gi more, 305 Montgomery street.  
Burlington, gold and silver, Esmeralda District, J F Sterling, 33 Montgomery Block.  
Blue Ledge, g & s, Kelsey district, I D Ingoldsb, 80 Merchant street  
Baltic, gold and silver, Placerville, Eldorado Co., S. N. Bosworth, No 9, Express Building.  
Black Belt, gold and silver, Virginia, Henry S. Fitch, 426 Montgomery street.  
Bell & Baldwin, tunnel & mining, Co., Esmeralda, N. G. French, 426 Montgomery street.  
Bay City, gold, silver and copper, Clayton district, Alfred Mayers 625 Merchant street.  
Brilliant, silver, Union district, San Bernardino, C. S. Higgins, 410 Montgomery street.  
Burton, gold and silver, New Esmeralda, C. E. Buckingham, 607 Clay street.  
Beard & Seaver, gold and silver, Reese River, W. T. Reynolds, 423 Front street.  
Big Blue Lead, gold and silver, Reese River, A Marcus 513 Mo. tgomery street.



Blue Lodge Lovell, silver, Reese River, David Wilder, 522 Montgomery street.  
 Bed Rock, gold and silver, Virginia district, A. C. Teitman, 611 Clay street.  
 Bald Eagle, gold and silver, Goldflat district, N. T., T. L. Bibbins, 305 Montgomery street.  
 Brown, gold and silver, Raymond district, T. J. Owens, No 1, Armory Hall.  
 Buckeye, gold and silver, Argentine district, D. C. Breed, corner of Clay & Battery streets.  
 Big Cañon, gold and silver, Eldorado county, T. W. Gross, 436 Jackson street.  
 Bohemia, gold and silver, Mono county, C. H. Watson, 528 Montgomery street.  
 Benson, gold and silver, I L Pool, 540 Washington street.  
 Brewster, Gold and silver, I L Pool, 540 Washington street.

Clear Creek Silver Mining Co., Sierra Dis., N. T., John M. Burnett, 536 Washington St.  
 Clara G. & S. Mining Co., Inyo Dis., David Wilder, 522 Montgomery St.  
 Chilpanzingo, silver, Mexico, H C Kibbe, 542 Sacramento street.  
 Consolacion, silver, Durango, Mexico, Michael Hawkins, 403 Pine street.  
 Cumberland, copper, Garden Bar Dist, Placer coun y, J H Culver, 43 L street, Sacramento  
 Chicago, g and s, Reese River Dist, 228 Front street.  
 Cherokee, g and s, Echo Dist, Humboldt, L Franconi, Lucas & Turner's Building.  
 Capitola, gold, silver and copper, Uvas Dist, Santa Clara co, D R Beckford, 328 Mont. St.  
 Colorado, gold and silver, Virginia City, Henry S Fitch, 426 Montgomery street.  
 Clear Creek, silver, C Stevens, 505 Montgomery St.  
 Columbus, gold and silver, C B Hart, 15 Metropolitan Block.  
 Cox and Rose G. & S. Mining Co., Reese River, Wm Hollis, 410 Montgomery street.  
 Chrysopolis G. & S. Mining Co., Silver mountain, Mono county, E C Lovell, 436 Jackson St.  
 Copper Age Min'g Co. Clayton dis., Contra Costa co, J W Crosley, 9 & 10, Governm't Hse  
 Contra Costa, g. s. & c., Contra Costa co, J W Crosley, 9 & 10 Government House.  
 Cammeron, gold and silver, Ohio dist., Humboldt, G Falkenstein 426 Montgomery street.  
 Cal. Copper Smelting Works, Antioch, R Emerson 540 Clay street.  
 Columbia G. & S. & C. Mining Co., La Paz, Arizona Ter., A. S. Gould, 528 Clay street.  
 Chautagne, Silver Mining Company, Reese River, R N Van Brunt, 706 Montgomery street.  
 Chrysal, g & s, Silver mountain district, J L Pool, 540 Washington street.  
 Consolidated, copper, Copperopolis, Richard Powning, Superintendent.  
 Calaveras, copper, Copperopolis, Richard Powning, Superintendent.  
 Cuba, gold and silver, Humboldt district, E Flanagan, 8 Naglee's Building.  
 Capiapo, silver, W P Dewey, corner Clay and Montgomery street.  
 Constantia Mining Co. Humboldt district, J H Gager, Montgomery Block.  
 Copper Hill Mining Co. Soledad district, Los Angeles, E Barry, 636 Sacramento street.  
 Choyo, gold and silver, Esmeralda district, D S Levy, Esmeralda.  
 Cincinnati, silver, Reese River district, P B Cornwall, 608 Merchant street.  
 Camanche, gold and silver, Sugar Pine district, A S Gould, 528 Clay street.  
 Cash, gold and silver, Palmyra district, A L Chamberlin, 413 Montgomery street.  
 Codicia Silver Mining Co. Gold Hill District, S B Rooney, Government House.  
 Carrazalita Silver Mining Co. Gold Hill District, S B Rooney, Government House.  
 Clio, gold and silver, Tuolumne Co. J F Pope, 115 California street.  
 Central, silver, Virginia District G B McAneny, 712 Montgomery street.  
 California, silver, Virginia District, D W Young N E corner Montgomery and Jackson.  
 Cole, silver, Virginia District, W E Wood, 123 California street.  
 Cedar Hill Tunnel M Co. C L Farrington, 509 Sacramento street.  
 Copper and Silver City, gold and silver, Silver City, E H Platt, Virginia City.  
 Chenango Mining Co. W E Dean, 53 Montgomery Block.  
 Con. Silver Hill, gold and silver, Esmeralda District, S Pattee, 522 Montgomery street.  
 Crown Point, gold and silver, Gold Hill District, S B Rooney, 11 Government House.  
 Combination, gold and silver, Telescope District, David Wilder, 522 Montgomery street.  
 Consumes Mining Co. Sacramento Co. ——— Dayler's Ranch.  
 Carbon Hill, Mining Co. Virginia District, ——— Aurora, Mono Co.  
 Cape, silver, Esmeralda District, H S Sanders Aurora, Mono Co.  
 Crescent, gold and silver, Van Horn Dis. J S Luty, 305 Montgomery street.  
 Corcoran, gold and silver Esmeralda District, J Woodthorpe, 326 Clay street.  
 Carrie Bell, gold and silver, Esmeralda District, W L Duncan, Pioneer Hall.  
 Cedar, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
 Cook, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
 Cocheo Mining Co. Humboldt District, N B Mulville, 606 Montgomery street.  
 Caledonia, gold and silver, Gold Hill District, W B Agard, 412 Front street.  
 Chrysopolis, gold and silver, Virginia District, H Toomey, cor. Montg. and California.  
 Colorado gold and silver, La Paz, N M. R E Raimond, 515 Front street.  
 Cataraugus, gold and silver, Slate Range District, A H Clark, 522 Montgomery street.  
 Clear Creek, silver, Washoe & Eagle District, C Stevens, 6 Parrott's Building.  
 Chrysopolis, silver, Mono County, J H Gager, Montgomery Block.  
 Concert, gold and silver, Esmeralda District, Thomas Brownjohn, 621 Clay street.  
 Cayuga Mining Co. Slate Range District, G J Turner, 606 Montgomery street.  
 Croesus, gold and silver, Eagle & Washoe district, J P Nourse, Lucas & Turner's Building.  
 Christiana, gold and silver, Esmeralda district, J F Nesmith, 502 Montgomery street.  
 Chicago, gold and silver, Esmeralda district, J Woodthorpe, 326 Clay street.  
 Corinthian, gold and silver, Esmeralda district, J H Purkitt, 655 Washington st.  
 Colusa, gold and silver, Prince Royal district, M G Elmore, 528 Montgomery street.  
 Cedar, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Clemens, gold and silver, Esmeralda district, C E Buckingham, 607 Clay street.  
 Comet, gold and silver, Russ district, D Wilder, 522 Montgomery street.  
 Congress, gold, Slate Range district, W A West, 419 Montgomery street.  
 Constellation, gold and silver, Humboldt district, V B Post, Lucas & Turner's Building.  
 Cleopatra, gold and silver, Wm H Watson, 607 Clay street.  
 Carico, silver, Reese River district, A S Gould, 528 Clay street.  
 Cassius, gold and silver, Buena Vista district, F R Jenkins, 80 Merchant street.  
 Caledonia Tunnel, M Co. Gold Hill District, S B Rooney, Government House.  
 Chilon, gold and silver, T B Robinson, 596 Front street.  
 Charles Cany Mining Co., Devil's Gate, Gomer Evans, 338 Montgomery street.  
 Carlton, silver and copper, Weaver District, C T, G J Turner, 606 Montgomery street.  
 Celestia, silver and copper, Weaver District, C T, G J Turner, 606 Montgomery street.  
 Curtis Mining Co. Reese River District, M R Wallis, 15 Metropolitan Block.  
 Cortez, gold and silver, mining co, Cor. dis, R N Van Brunt, 706 Montgomery street.  
 Cosmopolitan, gold and silver, Monitor district, Am Co. I J Owens, 1 Armory Hall.  
 Capital, gold and silver, Reese River distr ct, M L McDonald, 34 Metropolitan Block.  
 Croesus, gold and silver, Ormsby County, J H Gager, corner Montgomery and Merchant  
 Consolation, gold and silver, A H Griswold, Virginia City.  
 Crown Lead, g. s. and c., Colorado Ravine, Mariposa County, J W Gould, 406 Monr'y st.  
 Cosette, silver and copper, L Franconi, Lucas & Turner's Building.  
 Contra Costa, gold & silver, J W Crosley, Government House.  
 Cayuga, gold, silver and copper, Van Horn District, C W Curtis, 606 Montgomery street.  
 Constitution, gold and silver, Lander County, N T, J C Ford, 607 Washington street.  
 Central American, g & s, Gold Hill district, I L Pool, 540 Washington street.  
 Chollar, silver, Virginia District W E Dean, 53 Montgomery Block.  
 Chicago and Detroit Consolidated, g & s, Monitor dis., H Dreschfeld, 24 Naglea bld.

California, silver and cop., Catalena Island, Sam. P. Howes, 42 & 43 Government House.  
 Coso, silver, Coso District, D W Chambers, 11 Court Block.  
 Cherokee, gold and silver, Reese River, W. J. Whipple, 625 Market Street.  
 Comet, gold and silver, Slate Range, D. Wilder, 522 Montgomery street.  
 Corolita, gold and silver, Big Creek Cañon, W. A. Wheel r, 14 Government House.  
 Chihnahua & Western Summit, Esmeralda, W. L. Higgings 630 Montgomery street.  
 Comet, gold and silver, Reese River, W. T. Reynolds, 423 Front street.  
 Copper Hill, Ludivico del Norte county, W. E. Moody, 706 Montgomery Street.  
 Caripee, gold and silver, R. O. Sturtevant, 612 Montgomery street.  
 Coquette, gold and silver, E. Worth, 517 Washington street.  
 California, gold and silver, St. Marys district, J. O. Pray, 626 Merchant street.  
 Crescent, copper, Del Norte county, H. Friedman, 210 Battery street.  
 Capriza, copper, Carmen Island, A. S. Gould, 528 Clay street.  
 Chimney Rock, gold and silver, Virginia, Henry S. Fitch, 426 Montgomery street.  
 Clarisy, gold and silver, Palmyra, A. Pichou, 629 Clay street.  
 Cinco Senores, gold and silver, Sinaloa, Mexico, I L Pool, 540 Washington street.  
 Croesus, Original, gold and silver, Sierra district, N. T., E H Field, 420 Montgomery street.  
 Daniel Webster, gold and silver, Devil's Gate Dis., Alex Stott, 512 Sansome St.  
 Danube, gold and silver, H Pichou, cor. Jackson & Montgomery Sts.  
 Diamond, gold and silver, C B Hart 15 Metropolitan Block.  
 Die Vernon, silver, R T Polk, 56 Montgomery Block.  
 Diana, g and s, Reese River Dist, 228 Front street.  
 Donophan, g and s, Humboldt Dist., N T, H C Kibbe, 542 Sac. street.  
 Don Juan G. & S. Mining Co., Esmeralda Dis. David Wilder, 522 Montgomery St.  
 Desert Mining Co. Flowery District, D Wilder, 522 Montgomery street.  
 Daney, gold and silver, Devil's Gate District, A De Senailhac, Government House.  
 Dios Padre, gold and silver, Sonora, Mexico, J T Nesmith, 502 Montgomery street.  
 Doyle, gold and silver, Esmeralda district, J Woodthorpe, 326 Clay str et.  
 De Soto, gold and silver, Star district, R C Page, 428 Montgomery street.  
 Danube, gold and silver, Esmeralda district, J H Purkitt, 655 Washington st.  
 Dane, gold and silver, Esmeralda district, J R Beard, 4 Armory Hall.  
 Davis Consolidation, gold and silver, Esmeralda dist. C E Buckingham, Aurora, Mono, Co  
 Dayton, gold and silver, W H Watson, 607 Clay street.  
 Deposit, gold and silver, Esmeralda, R Clark, 40 Metropolitan Block.  
 Dell, gold and silver, John Fowler, corner Clay and Battery.  
 Del Rey, silver, Devil's Gate District, David Wilder, 522 Montgomery street.  
 Dannebrog, gold quartz, Yuba County, C L Farrington, 528 Sacramento street.  
 Don Pedro gold and silver, Esmeralda district, J H Purkitt, 655 Washington st.  
 Dashaway, gold and silver, Esmeralda, J F Miller, 327 Montgomery street.  
 Delta, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street.  
 Dixon, gold and silver, Table mountain district, E Flanagan, 8 Naglee's Building.  
 Douglas and Fillmore Con. gold and silver, San Francisco district, W Hollis, 410 Mont.  
 Dimes No 2, gold and silver, Esmeralda district, J Armstrong, 610 Merchant street.  
 Detroit, gold and silver, Humboldt district, V B Post, Lucas & Turner's Building.  
 Dundas, gold and silver, Silver City District, J H Purkitt, 655 Washington st.  
 Del Monte Cross Con. G & S Mining Co., Esmeralda, Wm T Atwood, 224 Montg' street.  
 Defiana, gold and silver, Gold Hill, W. E. Dean, Montgomery block.  
 Express Mining Co., Russ District, David Wilder, 522 Montgomery St.  
 Eureka & Elizabeth Con. S. & C., Calaveras county, R F Roth, 515 Market St.  
 Excelsior, G & S, Lander Co., N. T., N B Mulville, 606 Montgomery St.  
 El Tesoro S. M. Co., Lower California, H C Kibbe, 542 Sacramento street.  
 Enterprise, g and s, Colorado Dist, Arizona R Clarke, 40 Metropolitan Block.  
 El Dorado Consolidation, g and s, Devil's Gate Dist, Lyons co, N T, J F Pope, 13 Cal. St.  
 Eclipse Tunnel Co, Humboldt, L Franconi, Lucas & Turner's Building.  
 E. L. Sullivan's Mining Company, San Francisco District.  
 El Dorado, Con. gold and silver, J F Pope, 113 California Street.  
 Emma Antonette, gold and silver, E Chevasus, 716 Montgomery St.  
 Eastern Star, C W Hayden, 606 Montgomery St.  
 Eureka, gold, Sampson Tams, 214 California St.  
 Eastern G. & S. Mining Co., Reese River, Wm Hollis, 410 Montgomery street.  
 Express, gold and silver, Palmyra district, J F Miller, 327 Montgomery street.  
 Express, gold and silver, Silver City District, J. H. Purkitt, 655 Washington st.  
 Echo, g. & s. M. Co., Gold Hill district, N. T., N Shiverick 605 Clay street.  
 Echo Extension, gold and silver, Gold Hill district, N. T., N Shiverick 605 Clay street.  
 El Gran Roder Copper Mining Co., La Paz, Arizona Ter., R Emerson, 540 Clay street.  
 Esmeralda, silver, Esmeralda district, S Pattee, 522 Montgomery street.  
 Esmeralda 1st Extension N M Co. Esmeralda district, S Pattee, 522 Montgomery street.  
 Eastern Slope Mill & M Co. Silver City, J J Cushing, 727 Clay street.  
 Excelsior Mill & M Co. Silver City, ——— Silver City.  
 Early Dawn, gold and silver, Devil's Gate district, J H Brewer, 40 Montgomery street.  
 Estrick, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Emmett, Geo. gold and silver, Esmeralda district, John Woodthorpe, 326 Clay street.  
 El Dorado, gold and silver, Virginia district, Henry Toomey, corner Montgomery and Cal.  
 Everett, gold and silver, Humboldt district, J H Gager, Montgomery Block.  
 Empire, gold and silver, Silver City, B P Ridgway, Metropolitan Hotel.  
 Empire, gold and silver, Esmeralda district, O H Wakelee, 612 Merchant street.  
 Eagle Mining Company, J C Hoyt, N W corner Montgomery and Commercial.  
 Emma, gold and silver, Dayton, Lyon Co. ——— Dayton, Lyon Co.  
 E-trela, Del Monte, gold and silver, Humboldt district, J H Gager, Merchant street.  
 Esmeralda, gold and silver, Buena Vista, H Co, J S Luty, 305 Montgomery street.  
 East Antelope, gold and silver, Silver Hill district, J H Blood, 7 Montgomery Block.  
 Empire Mill and Mining Co. Gold Hill district, G R Spinney, Metropolitan Block.  
 Electrical, gold and silver, Esmeralda district, E Worth, 547 Washington street.  
 El Tigre a Colorado, gold and silver, Durango, Mexico, C L Farrington, 528 Clay street.  
 Enterprise, gold and silver, El Dorado Canon, R Clark, Lyceum Building.  
 Exchange, copper, Del Norte county, H. S. Dalliba, 604 Montgomery street.  
 Empire, gold and silver, Coso, J F Miller, 607 Washington street.  
 Eureka, gold and silver, Silver mountain Dis., T J Owens, 1 Armory Hall.  
 Enterprise, copper, Placer County, M G Elmore, 528 Montgomery street.  
 El Paso, gold and silver, Esmeralda district, J F Sterling, 33 Montgomery Block.  
 Esmeralda Spur, gold and silver, Esmeralda district, C W Curtis, 606 Montgomery street.  
 Ethan Allen gold and silver, Reese River district, M L McDonald, 34 Metropolitan Block.  
 Evangeline, gold and silver, Gold Hill district, N E Grimes, 4 and 5 Government House.  
 Excelsior, gold and silver, El Dorado district, N T, I L Pool, 540 Washington street.  
 Eastern (front lead) M Co. Virginia district, J S Davis, 18 Montgomery Block.  
 Evoca Consolidation, copper, Del Norte district, E Barry, 636 Sacramento street.  
 Empire, mining and tunneling, I L Pool, 540 Washington street.  
 Exchange, copper, gold and silver, Forest Home, Amador county, N. King.  
 Eliza Anderson, gold and silver, Reese River, Wm. J. Whipple, 625 Merchant street.



Empire, gold and silver, Santa Cruz district, Alfred Mayers 625 Merchant street.  
Eureka, gold and silver, Cinnabar district, N. T., F. H. Rogers, 607 Washington street.  
East Live Yankee, gold and silver, Esmeralda, R. Robinson, 636 Sacramento street.  
Empire, gold and silver, Gold Hill district, 407 Front street.  
Excelsior, copper, Carmen Island, F. H. West, 2 Armory Hall.  
Eureka, gold and silver, North San Juan, Cal., Sampson Taems,  
Federal State G & S Mining Co., Middle Hill, Esmeralda district, T Wetzol, 629 Clay St.  
Fidelity, g, s and c, Contra Costa Co., J A Woodson, Barron's Building, Merchant street.  
Fair Play, copper, gold and silver, Shay Gulch, J H Fry, Metropolitan Block.  
Fortune, gold and silver, Cinnabar dis., Humboldt, G Falkenstein, 426 Montgomery street.  
Figaro, gold and silver, Alpine Dis., Alex Stott, 512 Sansome St.  
Francis, silver, A H Clark, 522 Montgomery St.  
Freyburg, silver, Gold Hill, I L Pool, 540 Washington St.  
Frank, g and s, Silver Mountain, T J Owens, 502 Montgomery street  
Flume Ledge, g and s, Calaveras county, Montgomery Maze, 10 Government House  
Franklin, G & S, Lander Co., N. T. H S Brooks, Government House.  
Falls of Clyde, gold and silver, Esmeralda district, W L Duncan, Pioneer Hall.  
Flowers Mill Co. Flowery district, James Peck, 707 Sansome street.  
Foundation M and Trust Co. Esmeralda district, A Davidson, Oakland, Alameda County.  
Franco-Amerienna, gold and silver, San Antonio, L C, A S Gould, 528 Clay street.  
Flitway, gold and silver, Esmeralda district, P B Oppenheimer, Aurora, Mono County.  
Fulton, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
Feder I Union, gold and silver, Esmeralda district, J T Bailey, Metropolitan Block  
Franklin Tunnel Mining Co. Esmeralda district, P B Cornwall, 608 Merchant street.  
Frankfort, Esmeralda district, Jno M Burnett, 605 Montgomery street.  
Francis Ist S E Extension, gold and silver, Slate Range district, A H Clark, 522 Montg. st.  
Filmore, gold and silver, Slate Range district, W W Lawton, 409 Montgomery street.  
Foundry, gold and silver, W W Wiggins, 608 Montgomery street.  
Fork, gold and silver, Blue Mountain district, W H Jessup, 33 Fremont street.  
Fort Point, gold and silver, El Dorado county, J F Miller, 327 Montgomery street.  
Flor de San Antonio, gold and silver, John Fowler, Clay st. corner of Battery.  
Foundling, gold and silver, Wm E Moody, 706 Montgomery street.  
Felix, g & s, Devil's Gate District, William Willis, 712 Montgomery street.  
Fanny Read, silver, F W Gross, 436 Jackson at eet.  
Federal Republic, silver, Virginia District, N Shiverick, cor. Montgomery and Clay streets.  
Fellows Quartz Mining Co., Sierra county, J Dardano, Lucas & Turner's building.  
Falstaff Mining Co., J T Bailey, Metropolitan Block.  
F C Lomis, gold and silver, Gold Hill District, S T Steele, Virginia City.  
Flowery, Flowery district, J G Gilchrist, Virginia City.  
First S. Ext. Chihuahua Mining Co., Esmeralda District, W W Lawton, 400 Mont'y St.  
Federal Hop., gold and silver, Esmeralda District, Thos. Brownjohn, 621 Clay street.  
Favorite Mining co., Virginia district  
First N. E. Extension Winnemucca, Esmeralda, F H Rogers, 607 Washington street.  
Fredonia, gold and silver, Esmeralda, N. G. French 426 Montgomery street.  
51 Union, Placer county, W. H. Hunt,  
"420" Mining Co, Virginia City, J. P. Cava'ier, 619 Washington street.

Golden Era, gold and silver, C B Hart, 15 Merropolitan Block.  
General Kibbe G. & S. Mining Co., Esmeralda Dis., David Wilder, 522 Montgomery St.  
Great Central Mining Co., H C Repps, 542 Sansome St.  
Golden Wedge, silver, Gold Hill, N Shiverick, 605 Clay Street.  
Great Western Tunnel Co., Esmeralda Dist, J C Ford, 526 Washington street  
Grissim Consolidation, W C Budd, 607 Washington street  
Granite Copper Mining Co, Contra Costa county, F H Rogers, 607 Washington street.  
Great Chieftan G & S Mining Co., Snokey Valley Dis., T Wetzol, 629 Clay street.  
Great Republic, gold and silver, Silver City District, J H Parkitt, 655 Washington st.  
Golden Gate, silver, Gold Hill distr. N. T., N Shiverick, 605 Clay street.  
Golden Hedge, gold and silver, Gold Hill dist. N. T., N Shiverick 605 Clay street.  
Golden Magnet, gold and silver, Cinnabar dist. Humboldt, G Falkenstein, 426 Montg'y st.  
Golden Wedge G & S Mining Co., Esmeralda Dist, Wm T Atwood, 224 Montgomery St.  
Gen. Jackson, gold and silver, Devil's Gate Dis., Alex Stott, 512 Sansome St.  
Great Central Min'g Co., Colorado River, A. T., H C Kibbe, 542 Sac. street  
Guadalupe, silver, Chihuahua, Mexico, Wm Blackwood, 742 Washington street.  
Gould & Curry, gold and silver, Vir'a Dist, J C L Wadsworth, Lucas & Turner's building.  
Good Hope, Nevada Territory, D Davidson, 338 Montgomery street.  
Great Central Mining Co., J W Collins, 326 Clay street.  
Garibaldi, gold and silver, Esmeralda District, J T Nesmith, 502 Montgomery Street.  
Gazelle, gold and silver, Esmeralda District, Daniel Clark, Court Block.  
Gold Hill Union Mills, gold and silver, Gold Hill Dist, J F Sterling, 33 montgomery block  
Great Western Mining Co., Coso Dist., Tulare Co., Barclay Henley, Express Building.  
Gen. Grant, gold and silver, Esmeralda District.  
Gen. Jackson, gold and silver, Esmeralda District, P B Oppenheimer, Aurora.  
Golden Age, gold and silver, Humboldt District, A L Chamberlin, 413 Montgomery St.  
Gobernadora, silver, San Antonio, L. C., C W Hayden, 606 Montgomery street.  
Gov. Seymour, gold and silver, Reese River district, ——— 228 Front street.  
Gen. Hooker, gold and silver, Virginia district, J H Brewer, 40 Montgomery block.  
Guadalupe de Los Angeles, gold and silver, L A Sanderson, 1 Armory hall.  
Georgiana, gold and silver, Slate Range District, W W Lawton, 400 Montgomery street.  
Golden Era, silver, F W Gross, 436 Jackson street  
Golconda, gold and silver, Reese River District, M L McDonald, 34 Metropolitan block.  
Great Western Tunnel & Mining Co., Coso district, W W Lawton, 400 Montgomery St.  
Golden Wedge, silver, J P Nourse, Lucas & Turner's building.  
Gold Hill Quartz Mill & Mining Co., Gold Hill district, Wm V Garvey, 619 Merchant St.  
Gould & Curry No 1 Mining Co.  
Globe, gold and silver, Wm. H Watson, Aurora. } Or to O. E. Buckingham,  
Grand Turk, gold and silver, Wm H Watson, Aurora. } 607 Clay street, San Francisco.  
Gray Eagle, gold and silver, Wm H Watson, Aurora.  
Gem, gold and silver, Esmeralda district, T Flitcroft, 617 Clay street.  
Gorthe Mining Co, Esmeralda district, J H Parkitt, 655 Washington at.  
Green Rock Mining Co, Angel's Camp, E A Breed, cor Jackson and Montgomery streets.  
Ralvin Mining Co., Esmeralda district, F. H. Rogers, 607 Washington st.  
Golden Era Mining Co., E C Lovell, 436 Jackson street.  
Gold Hill Big Ledge Mining Co., Wm Willis, 712 Montgomery street.  
Great Eastern, gold and silver, Virginia District, L F Yates, South C. St., Virginia City.  
Gov. Nye, gold and silver, Devil's Gate district, Geo. M Blake, 5 Government house.  
Golden Rule Mining Co., Tuolumne Co, J B Russell, 410 Montgomery street.  
Gem of Nevada, gold and silver, Wm Willis, 712 Montgomery street.  
Granite Rock, gold and silver, Cedar Hill district, T Brownjohn, 621 Clay street.  
Green Rock Tunnel Co., Esmeralda district, L D Ingoldsby, 80 Merchant St.  
Great Basin Mining Co., Humboldt district, J H Blood, 7 Montgomery Block.

Geo. Emmet, gold and silver, Esmeralda district, J Woodthorp, 326 Clay street.  
Grey Ledge, gold and silver, Murphy's district, M G Elmo e, 528 Montgomery street.  
Golden Gate, Tunnel & Mining Co., Reese River, David Wilder, 522 Montgomery street.  
Greeneck, Mining Co., Calaveras county, E A Breed, Lucas & Turner's building.  
Golden Age, gold and silver, Reese River, E C Lovell, 436 Jackson street.  
Golden Ark & Star of Empire, gold and silver, Otto Kloppenburgh.  
Gresh Consolidated, gold and silver, Virginia, district, J L Samuels.  
Great Eastern, gold, Tuolumne county, Isaac Swain, 406 Montgomery street.  
Gem, gold and silver, Sierra district, N. T., E H Field, 420 Montgomery street  
Garibaldi & Belvidere Con. gold, silver and copper, Clayton district, A Carrier.  
Gold Hill Big Ledge, Mono county, W E Dean, 53 Montgomery block.  
Green Lode gold, silver and copper, Plumas Co, G W Hodgkins.  
Greenville Consolidated, gold and silver, Virginia, H S Fitch, 426 Montgomery street.  
Gildersleeve, gold and silver, Genoa, H S Fitch, 426 Montgomery street.  
Golden Gate copper and silver, Clayton dis., Contra Costa, S C Gardiner, Commercial St.  
Great Western, gold and silver, W W Lawton, 400 Montgomery street.  
Humboldt Tunnel Co., gold and silver, Esmeralda, F H Rogers, 607 Montgomery street.  
Harrison Coal and Plaster Mining Co., San Mateo county, J F Miller, 327 Montgomery St.  
Hydraulic mining co, Contra Costa co., Montgomery Maze, 9 & 10 Government House.  
Humboldt Great Consols, Humboldt, R F Van Brunt, 706 Montgomery street.  
Horse Shoe, silver and copper, Mont Diablo, Alex Stott, 512 Sansome street.  
Hope, gold and silver, O B Hart, 15 Metropolitan Block.  
Honest Miner, gold and silver, Reese River Mining District, 228 Front street  
Harry Raymond G. & S. Mining Co., Oro Fino Dis. John M Burnett, 536 Washington St.  
Hornitas, gold and silver, Mariposa county, J A Kieux, 661 Washington street.  
Harris, gold and silver, Esmeralda district, Hugo Dreschfeld, 24 Naglee's buildi g.  
Higgins' Hope, gold and silver, San Francisco Co, Hugo Dreschfeld, 24 Naglee's building.  
Harker, gold and silver, Reese River district, 228 Front street.  
Haral, gold and silver, Sinaloa, Mexico, W H Martin, 617 Clay street.  
Hornet Mining Co., Virginia district, C H Light, Virginia City.  
Hope Mining Co., Gold Hill district, F W Gross, 436 Jackson street.  
Hale & Norcross, silver, Virginia district J F Lightner, Metropolitan block.  
Harrison, gold and silver, Flowery district, Henry Toomey, N E cor Mont. and Cal. St.  
Hazel Green, gold and silver, Virginia district, T Brownjohn, 621 Clay street.  
Heath, gold and silver, Esmeralda district, H D Bequette, Aurora.  
Hawley, gold and silver, Devil's Gate district, C Stevens, 6 Parrott's building.  
Humboldt Mining Co., Galena district, I L Pool, 540 Washington street.  
Hattie, gold and silver, Esmeralda district, J H Parkitt, 40 Metropolitan Block.  
Hope, gold and silver, Prince Royal district, L Franconi, Lucas & Turner's building.  
H. mine, gold and silver, Esmeralda district, C H Wakelee, 612 Merchant street.  
Hayes, gold and silver, Slate Range district, C H Wakelee, 612 Merchant street.  
Halleck, gold and silver, Great Mogul district, I L Pool, 540 Washington street.  
Humboldt, gold and silver, Russ district, D Wilder, 522 Montgomery street.  
Heckendorn, gold and silver, Blue mtn., Calav. Co., C C Bowman, 726 Montgomery street.  
Hebe, gold and silver, Reese River district, Wm V Garvey, 619 Merchant street.  
Highland, gold and silver, Humboldt district, Wm A Cornwall, 655 Washington st,  
Harrison, gold and silver, Geller Ledge, L F Yates, Virginia City.  
Hensley, silver and copper, Weaver district, C. T., G J Turner, 606 Montgomery street.  
Humboldt Canal Mining Co., Humboldt dist, E A Breed, cor. Jackson and Mont'y Sts.  
Hartford Tunnel and Mining Co., R Clark, Esmeralda, 40 Metropolitan Block.  
Hudson, gold and silver, Devil's Gate District, I L Pool, 540 Washington street.  
Hartford Mining Co., Gold Hill district, J S Davies, 18 Montgomery block.  
Hamlet, gold and silver, Reese River, David Wilder, 522 Montgomery street.  
Harloe, gold and silver, David Wilder, 522 Montgomery street.  
Hildeberg, gold, silver and copper, C J Tedford, 637 Mission street.  
Honest Rock Mining Company, Placer county, W H Hunt.  
Halsted, gold and silver, Esmeralda, N G French, 426 Montgomery street.  
Halleck, gold and silver, Esmeralda, C E Buckingham, 607 Clay street.  
Hudson, gold and silver, Sierra county, T L Bibbins, 305 Montgomery street.  
Herzog Consolidation, gold and silver, Excelsior district, G J Turner, 606 Montgomery St.  
Howard, gold and silver, Reese River, C E Buckingham, 607 Clay street.

Ina Ledge, gold and silver, Devil's Gate Dis., J Mulville 506 Jackson St.  
Illinois Tunnel and Mining Co, Esmeralda Dist, J F Pope, 113 Cal. street  
I X L, gold and silver, Arizona, N B Mulville, 606 Montgomery St.  
Isaacs, gold and silver, Esmeralda district, Jas. Neary, 326 Clay steert.  
Iowa, mining co. Virginia district, R N Van Brunt, 706 Montgomery street  
Ida, gold and silver, Russ district, David Wilder, 522 Montgomery street.  
Indian Queen, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
Insurance Miniug Co., Jas Gallagher, 706 Montgomery street.  
Inadianola, gold and silver, Humbolt District, J F Pope, 113 California street.  
Iowa, gold and silver, C V Hobart, 505 Montgomery street.  
Irataba, silver and copper, Weaver District, G J Turner, 606 Montgomery st.  
Indian, gold and silver, John C Leoney, Virginia City.  
Independent gold and silver, Argentine District, E E Phillips, Virginia City.  
Ironclad, gold and silver, El Paso District, Edward Barry, 636 Sacramento st.  
Imperial, gold and silver, Gold Hill, C T Hopkins, 405 Front st.  
Irving, gold and silver, Virginia District, M L Winn, 542 Sacramento st.  
Imperatrice Eugenie, gold and silver, Calaveras Co, J Woodthorp, 326 Clay st.  
I X L, gold and silver, Esmeralda, Sam. P. Howes, 42 & 43 Government House.  
Isabella, gold and silver, Reese River, W B Johnston.  
Independent, gold and silver, Reese River, W T Reynolds, 423 Front street.  
Isabella gold and silver, Bodie district, Cal., C E Buckingham, 607 Clay street.

Jura, gold and silver, John Hunt, Jr., 3 U. S. Court Building.  
Jackson, copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sacramento  
Jefferson, copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sacramento  
Joe Lane, gold and silver, Reese River Mining District, 228 Front street  
Joe Douglas G. & S. Mining Co., Reese River Dis., R T Polk, 56 Montgomery Block.  
Jefferson, gold and silver, Slate Range, J F Miller, 607 Washington street.  
Jackson, gold and silver, Esmeralda District, ———, Aurora.  
Josephine, gold and silver, Coso District, W W Lawton, 400 Montgomery street.  
Jack Hayes, gold and silver, Esmeralda District, J H Blood, 7 Montgomery block.  
Jefferson, gold and silver, Esmeralda District, T L Bibbins, 305 Montgomery street.  
Jason Mining Co. Si rra and Nevada Co. L Maubec, 716 Montgomery street.  
Jenny Lind Mining Co. Esmeralda District, P B Cornwall, 608 Merchant street.  
Junata West Mining Co. P Basche, Silver City.  
Jefferson, gold and silver, Silver City, E N Bushford, Silver City.  
Jejeeboy, gold and silver, Santa Clara District, W Sparrow, 543 Clay street.  
James River, gold and silver, John Gorman 423 Battery street.  
Josephine, copper, Calaveras Co. T Brownjohn, 621 Clay street.



Julius, gold and silver, Reese River District, L. Franconi, Lucas & Turner's building.  
 Juno, gold and silver, Esmeralda district, M G Elmore, 528 Montgomery street.  
 Jesus de Atocha, Copala District, Mexico, R H Tibbitts, 542 Sacramento street.  
 Julia, gold and silver, Virginia City, A Noel 607 Washington street.  
 Jewel, gold and silver, Devil's Gate District, Cha's Gardner, Barron's Build. Merchant str.

Knickerbocker, and Monumental Consolidation, gold and silver, Contra Costa  
 Keystone, copper, Copperopolis, Calaveras county, Joseph Powning, Secretary at the mine.  
 Kentucky, gold and silver, Contra Costa, Cal., H C Kibbe, 542 Sac street  
 King, g and s, Reese River, E C Palmer, Government House  
 Keetz, gold, Tuolumne county, H C Kibbe, 542 Sac street  
 Knickerbocker, gold and silver, Jas Peabody, 542 Sacramento.  
 Kinderhook, gold and silver, A Falk, 605 Sacramento St.  
 Kohler Bros. silv. r, San Antonio, L. C. Kohler Bros. Sansone street.  
 Kohler, gold and silver, Esmeralda District, James Neary, 326 Clay street.  
 Keokuk, gold and silver, Esmeralda District, C H Wakelee, 612 Merchant street.  
 Kate, gold and silver, Prince Royal District, L. Franconi, Lucas & Turner's building.  
 Key Quartz Lode Mining Co. Slate Range District, L R Love, Custom House.  
 King David, gold and silver, Esmeralda District, T Brownjohn, 621 Clay street.  
 Keokuk, copper, A B Winegar, 322 Front street.  
 Keltz, copper, Tuolumne Co. H C Kibbe, 542 Sacramento street.  
 Kelley Consolidated, gold and silver, Virginia, Henry S Fitch, 426 Montgomery street.  
 Kansas Consolidated, gold and silver, Virginia, Henry S. Fitch, 426 Montgomery street.  
 Kenosha, gold and silver, Esmeralda, N G French, 426 Montgomery street.

La Libertad S. M. Co., Lower California, H C Kibbe, 542 Sacramento street  
 La Candelaria S. M. Co., Lower California, H C Kibbe 542 Sacramento street  
 Louisville, g and s, Humboldt Dist., N. T. H C Kibbe, 542 Sac. street  
 Lochinvar Mining Co., Gopher Dist, Calaveras county, A Marcus, 519 Montgomery street  
 Lebanon copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sacramento  
 Lilly of the West, G & S, Esmeralda, R Robinson, 636 Sacramento St.  
 Lightner, gold and silver, C B Hart, 15 Metropolitan Block.  
 Lady Adams, gold and silver, Reese River, R T Polk, 56 Metropolitan Block.  
 Lady Elizabeth, gold and silver, Silver Mountain, J A Woodson, Barron's b'g, Merchant St.  
 La Naud, gold and silver, San Francisco District, S W Corny, 410 Montgomery street.  
 Lady of the Lake G. & S. Mining Co., San Francisco Dis. Wm Hollis 410 Montgomery St.  
 La Plata Mining Company, Gold Hill district, N. T., N Shiverick, 605 Clay street.  
 La Gloria, gold, silver and copper, Ed Chetassus, 617 Montgomery street.  
 Lady Washington, silver, Virginia, N Shiverick, cor Montgomery and Clay.  
 Lady Franklin, silver, Virginia, N Shiverick, cor Montgomery and Clay.  
 Lone Star, silver, Esmeralda District, A Hanke, Aurora.  
 Lafayette, gold and silver, Gold Hill District, Wm E Moody, 706 Montgomery street.  
 Lucerne Mining Co. Gold Hill District, J S Paxson, City hall.  
 Lady Bryan, gold and silver, Flowery District, John T Bailey, metropolitan block  
 Latiobe Tunnel and Mining Co. Virginia District, R N Van Brunt, 706 Montgomery st.  
 Live Yankee, gold and silver, Esmeralda District, J A Moultrie, Aurora.  
 La Plata Mining Co. Esmeralda District, H S Sanders, Aurora.  
 Livingston, gold and silver, Esmeralda District, Jas Neary, 326 Clay street  
 La Amistad, gold and silver, Santiago, L. C. A de Senaillac, cor Montgomery & Jackson.  
 Los Cruzcitas Mining Co. Sonora, Mexico, C J Brennan, cor Jackson and Front streets.  
 Laurel Hill Mining Co. Tuolumne Co. Jno B Russell, 410 Montgomery street.  
 Lily Dale, gold and silver, Silver Hill, J R Beard, 4 Armory Hall  
 Los Angeles Con. gold, silver and copper, Soledad District, Alfred Denio, 104 California st  
 L yd, gold and silver, Esmeralda District, Isaac Tabor, 7 Armory Hall.  
 Lexington Tunnel Co. Star District, Chas E Judd, Montgomery street.  
 Loyal, gold and silver, Esmeralda District, W F Hitchcock, 7 Mead House.  
 Lowman, g ld and silver, Virginia District, Wm Knight, 414 Front street.  
 Lady Franklin, copper, Tuolumne Co. G J Turner, 606 Montgomery street.  
 Live Yankee, gold and silver, Slate Range District, W W Lawton, 400 Montgomery street  
 Live Washington, gold and silver, Slate Range D. W W Lawton, 400 Montgomery street  
 Luna, gold and silver, Esmeralda District, T Brownjohn, 621 Clay street.  
 Lafayette Mining Co. James Gallagher, 706 Merchant str et.  
 Loyal, gold and silver, Humboldt Co. F Vassault, corner Montgomery and Merchant.  
 Louisville, gold and silver, Humboldt District, H C Kibbe, 542 Sacramento street.  
 Lord Byron, gold and silver, Esmeralda District, H B Congdon, 621 Montgomery street.  
 Los Posos, gold and silver, La Paz District, T Brownjohn, 621 Clay street.  
 Louisa, gold and silver, Silver City, J F Pope, 115 California street.  
 Loomis, g ld and silver, Prince Royal District, W Sparrow, 543 Clay street.  
 La Palma, silver, San Antonio, L. C. J W Gould, 406 Montgomery street  
 Lulu, copper and silver, Weaver District, G J Turner, 606 Montgomery street.  
 Live Oak, copper, Gopher, Calaveras Co. J H Gager, Merchant street.  
 Lancaster Mill and Mining Co. Humboldt Co. N. T., C Wetzler, 320 Montgomery street.  
 La Blanca Mining Co. Sonora, Mexico, Chas Frieberg 408 Clay street  
 Lone Star Mining Co. Reese River, A L Whitney, 602 Washington street.  
 La Esperanza, Arizona, C A Eastman, 726 Montgomery street.  
 La Providencia Silver Mining Co. Copala, Sinaloa, Frank W Gross, 436 Jackson street.  
 La Mina del Norte Silver Mining Co. San Antonio, L. C., Henry Van Pelt, 436 Jackson.  
 La Mina Ophi Silver Mining Co. San Antonio, L. C. Henry Van Pelt, 436 Jackson street  
 Lizzie Leighton, Consolidation, Esmeralda District, J R Beard, 4 Armory Hall.  
 Lady Ellen, g & s, Silver City District, L D Ingold by, 80 Merchant street.  
 Longley, gold and silver, San Francisco district, A. T., S H Corey, 410 Montgomery street.  
 Lady of the Lake, gold and silver, Reese River, F K Mansel.  
 La Favorita Mining Co., Sonora, E Wassermann, 429 Sacramento Street.  
 Livingstone, gold and silver, Genoa, Henry S Fitch, 426 Montgomery street.  
 La Libertad Mining Co., Sonora, E Wassermann, 429 Sacramento street.  
 Liverpool, gold and silver, Sierra district, N. T., E H Field, 420 Montgomery street.  
 La Providencia, La Paz, New Mexico, Geo T Knox, 611 Montgomery street.  
 Lucy Ella, gold and silver, J J Mills, 420 Montgomery street.

Maximilian, copper, Weaver District, Colorado R ver, A Marcus, 519 Montgomery street  
 Mountain View, gold and silver, Calaveras county, O L Taylor 22 Montgomery St.  
 Milwaukee, gold and silver, Slate Range, James Hinchings, 13 Mead House.  
 Madraza, gold and silver, A Martinon, 811 Montgomery St.  
 McClelland, gold and silver, Olando Loucks, 11 Clay St.  
 Minerva and Gittels Con., Hugo Dreschfield, Nagle's Broadway.  
 Monitor, copper, C Stevens, 505 Montgomery St.  
 Magdalena, gold and silver, Edwin Harris  
 Monte Albano G. & S. Mining Co., Esmeralda Dis., David Wilder, 522 Montgomery St.  
 Martinez, gold and silver, Reese River Dis., John W Gould, 406 Montgomery St.  
 Mount Vernon, gold silver & copper, Clayton district, Montgomery Maze, Government house.  
 Mt. Davidson, gold and silver, Virginia district, F A Faben, 47 Montgomery block.  
 Meredith, gold and silver, Virginia district, E B Holmes, 712 Montgomery street.  
 Mayflower, gold and silver, Esmeralda district, W L Duncan, Pioneer building.  
 Mina Prieta, silver, Sonora, Mexico, J P Nourse, Luc s & Turner's building.  
 Moss, gold and silver, Virginia district, R C Page, 428 Montgomery street.  
 Montezuma Tunnel and Mining Co. Esmeralda district, Aurora.  
 Mt. Braly Summit, gold and silver, Esmeralda district, P B Oppenheim, Aurora.  
 Melones and Stanislaus, gold, silver and copper, Calaveras, Geo. Congdon, 629 Commercial  
 Mathews gold and silver, Esmeralda District, E Worth, 547 Washington street.  
 Merchant and Miners, gold and silver, Nevada Territory, M Lichenstein, Virginia City.  
 Musidora, silver, Sonora, Mexico, F H Waterman, 618 Merchant street.  
 Mohave, gold and silver, Lower California, G S Turner, 606 Montgomery street.  
 Mountain View, gold and silver, Slate Range district, W H Clark, 224 Montgomery street  
 Morrow East, gold and silver, Slate Range, district, W H Clark, 224 Montgomery street.  
 Milwaukee, gold and silver, Slate Range district, W T Atwood, 224 Montgomery street.  
 Mount Hope, silver, Virginia district, Thomas Brownjohn, 621 Clay street,  
 Mono Tunnel and Mining Company, Esmeralda District, L D Ingoldsb'y, 80 Merchant str  
 Manhattan gold and silver, Humboldt district, J H Gager, Montgomery Block.  
 Mayflower, gold and silver, Star District, 228 Front street.  
 Mason, gold and silver, Esmeralda district, 228 Front street.  
 Marnion, copper, gold & silver, Mariposa district, J T Hoyt, 415 Montgomery street.  
 Madison, gold and silver, Slate Range district, P B Cornwall, 608 Merchant street.  
 Miller, gold and silver, Esmeralda district, Isaac Tabor, 7 Armory Hall.  
 Mammoth No. 1, gold and silver, Esmeralda district, J R Beard, 4 Armory Hall.  
 Magna Charta, gold and silver, Humboldt, C E Judd, 523 Montgomery St  
 Monitor, gold and silver, Slate Range district, John Crowley, 428 Montgomery street.  
 Mammoth, gold and silver, William E. Moody, 706 Montgomery street  
 Monte Cristo, silver, Virginia district, E B Holmes, 712 Montgomery street.  
 Montreal Tunnel and Mining Co., Esmeralda district, J H Blood, 7 Montgomery Block.  
 Minerva, gold and silver, Gold Hill district, L D Ingoldsb'y, cor. Merchant and Mont'g sta  
 Muy Rico, silver and copper, Weaver District, Arizona, N B Mulville, 606, Montgomery st.  
 Mount Vernon, gold and silver, Esmeralda, R Clark, metropolitan Block.  
 Magnolia, gold and silver, Prince Royal district, Humboldt, Chas E Judd, 523 mont'gry st  
 Morning Star silver, Great Mogul District, C W Conro, 623 Merchant street.  
 Malta, silver, Gold Hill district, A L Chamberlain, 413 Montgomery street.  
 Merchant, silver, Esmeralda district, J F Sterling, 33 Montgomery Block.  
 Montgomery, gold and silver, Kern River district, G. J. Turner, 606 Montgomery street.  
 Marble Valley, gold and silver, Ohio district, El Dorado Co., D F Verdenal, 6 Court Block  
 Morning Star, gold and silver, Virginia City, N. T., Wm. A M Van Bokelen, Va. City.  
 Montgomery Mining Co., g and s, Momi or dis., Amador, T J Owens, 1 Amory Hall.  
 Mechanics', gold and silver, Clayton district, Contra Costa, A B Winegar, 322 Front street  
 Monte Christo, gold and silver, Palmyra district, N. T., M W Weil, 630 Sacramento street  
 Monte Christo, silver, Kern River district, G J Turner, 506 Montgomery street.  
 Mountain, gold and silver, W E Moody, 706 Montgomery street.  
 Mills', Gold and Silver Mining Co., Smoky Valley, R. R., F W Gross, 436 Jackson street.  
 Metropolitan, copper, Calaveras County, P B Cornwall, 608 Merchant street.  
 Monte Leon, G & S, P N Edwards, Barron's Building.  
 Murphy's Gulch Mining County, Amador County, C C Bowman, 726 Montgomery street  
 Mina Rica de las Flores Mining Company, A DeTavel, S. W. cor. Mont'y & Jackson Sta.  
 Margarita, silver and copper, Soledad district, L Franconi, Lucas & Turner's Building.  
 Mammoth Consolidated, Excelsior district, M G Elmore, 528 Montgomery street.  
 McMahon, gold and silver, Devil's Gate district, A Noel, 607 Washington street.  
 McClellan, gold, Virginia district, Jabish Clement, 48 Metropolitan block.  
 Missouri, gold and silver, Reese River district, M L McDonald, 34 Metropolitan block.  
 Mina, gold and silver, Esmeralda district, John Crowley, 428 Montgomery street.  
 Mount Zion, gold, silver and copper, Clayton dist, Montgomery Maze, 10 Gov't House.  
 Minturn & Garland, gold and silver, Virginia district, T Brownjohn, 621 Clay street.  
 Mount Washington, gold and silver, Virginia district, Henry Toomey 402 Montgomery St.  
 Midnight, gold and silver, Esmeralda district, William V. Garvey, 619 Montgomery street  
 Metropolitan, gold and silver, Silver Mountain District, T J Owens, 1 Amory Hall.  
 Mammoth Ledge, copper, Del Norte county, George F. Sharpe, U. S. Court building.  
 Moselle Mining Company, Esmeralda district, W W Lawton, 400 Montgomery street.  
 Mississippi, Virginia district, G H Bigelow over Parrott & Co.  
 Manzanillo, Copala Mine, Sinaloa, Mexico, Thomas Brownjohn, 621 Clay street.  
 Musquito Quartz Mining Company, Edward F. Eppard, 433 Montgomery street.  
 Ma chester G. & S. M. Company, Monitor dis. Amador, Hugo Dreschfield, 24 Nagle's b'd.  
 Marronena, silver, Lower California, Wm Faulkner, 411 Clay street.  
 Mahawk, g & s, Virginia District, H S Dalliba, 604 Montgomery street.  
 Minona, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Manhattan Mining Co., Edward Franklin, corner of Montgomery and California streets.  
 Monadnock, gold and silver, Sugar Pine district, A S Gould, 528 Clay street.  
 Mammoth Tunnel Mining Company, district, R N Van Brunt, 706 Montgomery S  
 Mountain No 1, gold and silver, Silver Mountain district, J B Pilkington, 402 Mont' St.  
 Minnehaha, silver and copper, Carmen Island, Sam. P. Howes, 42 & 43 Gov't House  
 Melones Creek, gold and silver, Calaveras county, California, A. Pichon, 629 Clay street  
 Malachite, gold and silver, Clayton district, Alfred Mayers 625 Merchant street.  
 Minnesota, gold and silver, Russ district, N G French, 426 Montgomery street.  
 Mayflower, gold and silver, Tulare Co., S N Bosworth No 9 Express building Mont'ry St  
 Mayflower, gold and silver, Coso, J C Pray.

Minnesota G & S Mining Co. No 1, Gold Hill Dis., Munro Thompson, Virginia City.  
 Mount Carmel, gold and silver, Argentine District, J H Purkitt, 655 Washington st.  
 Mona, gold and silver, Silver City District, J H Purkitt, 655 Washington st.  
 Mt. Vernon, g. s. & c. M. Co. Murphy's, Calav. Co. Montgomery Maze, 9 & 11 Gov't House  
 Macdonald, G., S., and C. M. Co., Contra Costa, Montgomery Maze, 9 & 11 Gov't House  
 Mount Ethna, silver and copper, Arizona Dis., C W Hayden, Montgomery St.  
 Mountain Queen, gold and silver, Reese River, John Gorman, 423 Battery street  
 Mandot, copper, H L Henschel 503 Battery St.  
 Monitor, gold and silver, Reese River Dist, 228 Front street  
 Mammoth, g and s, Humboldt Dist., N T, H C Kibbe, 542 Sac. street

Mount Vernon, gold and silver, Esmeralda, R Clark, 40 Montgomery Block.  
 Miller, gold and silver, Tulare county, F W Gross, 436 Jackson street.  
 Mountain Peak, gold and silver, H Dreschfeld, 25 Nagle's bldg.  
 Mary L. Gardiner, Esmeralda, T C McCullan, 617 Clay street.  
 Mystic, gold and silver, Gold Hill district, G T Kn x, 618 Montgomery street.  
 Marinea, gold and silver, J T Hoyt, 413 Montgomery street.  
 Mountain, gold and silver, Amador county, J B Pilkington, 402 Montgomery street.  
 Millard Fillmore, gold and silver, Reese River, J S Luty, 305 Montgomery street.  
 Nacosari, gold silver and copper, Sonora, Mexico, T B Bigelow, Cor. Jackson & Front.  
 New York Quartz Mining Co., S Pinkham 222 Sacramento St.



Norman G. & S. Mining Co., Stae Dis., Humboldt, John M Burnett, 536 Washington St.  
 New Esmeralda, gold and silver, T B Openheim, Aurora.  
 Nevada, gold and silver, Reese River Mining District, 228 Front street  
 Ne Plus Ultra, consol Weaver district, J H Harris, cor Clay & Sansone Sts.  
 Newsome, gold and silver, Silver City District, J. H. Purkitt, 655 Washington st.  
 Noonday, g. s. & c., Contra Costa, J W Crosley, 9 & 10 Government House.  
 Numan, gold and silver, Blue Sulphur Springs, Virginia, R N Van Brunt, 706 Montg'y st.  
 Noah Webster M. Co., Humboldt, R N Van Brunt, 706 Montgomery street.  
 New York, gold and silver, Gold Hill, N. T., H C Kibbe, 542 Sac. street  
 North Potosi, silver, Virginia dis., E V Joice, cor. Battery and Washington streets.  
 Norman, silver, Flowery district, John F Bailey, 40 Montgomery Block.  
 Napa Quartz Mining Company, Esmeralda district, ———, Napa City.  
 Norton, gold and silver, Virginia d strict, R N Van Brunt, 706 Montgomery street.  
 Nevada Tunnel & Mining Co., Esmeralda district, ———, Aurora.  
 New El Dorado, gold and silver, Virginia district, ———, Sacramento.  
 New York, gold and silver, Slate Range district, A H Clarke, 522 Montgomery street.  
 Nevada Mining Co., Esmeralda district, P B Cornwall, 608 Merchant streets.  
 Neversink, gold and silver, Esmeralda district, D Clark, Court block.  
 North Star, gold and silver, Humboldt district, J H Gager, Merchant St., Montgomery blk  
 Nightingill, gold and silver, Cinnabar district, A L Chamberlin, 413 Montgomery street.  
 Numa, gold and silver, Mono county, Wm. Fishel, cor. Battery and Sacramento streets.  
 North W Fra cis, gold and silver, Slate Range district.  
 North Star, gold and silver, Reese River district, J A Drinkhouse, 228 Front street.  
 New World, gold and silver, Wm H Watson, 607 Clay street.  
 New World gold and silver, N Webster, 608 Montgomery street.  
 N Y Pont G and S M Co, Gold Hill district, N K Lamson, Virginia city.  
 Norman Company, Virginia d strict, J H Brewer, 40 Montgomery street.  
 National, gold and silver, Esmeralda district, J F Sterling, 33 Montgomery street.  
 Nevada Coal Co, Boiling Springs district, Humboldt, C Gardner, 3 Barron's Building.  
 North, gold and silver, Star district, James Horrick, 606 Montgomery street.  
 New Era, copper, Salt Spring district, E Barry, 636 Sacramento street.  
 Noonday, gold and silver, Reese River district, L D Ingoldsbey, 80 Merchant street.  
 Niagara, gold and silver, American District, G J Turner, 606 Montgomery street.  
 Nashville, gold and silver, Oro Fino, Humboldt Co., N. T., E C Lovell, 436 Jackson street.  
 New Eden, gold and silver, Devil's Gate district, A S Gould, 528 Clay street.  
 Nevada, gold and silver, Nevada district, Cal. S Pinkham, Front street.  
 Noble, copper, Calaveras County, E A Breed, Lucas and Turner's Building.  
 Nevada, copper, Nevada Co, G V, John Armstrong, 610 Merchant street.  
 Napoleon, copper, Calaveras Co, R C Alden, 420 Montgomery street.  
 New Year Digger, gold and silver, Aug. Kurnast, 410 Montgomery St.  
 Niagara, gold and silver, Colorado district, M G Elmore, 528 Montgomery street.  
 Nevada Gold Quartz Mining Co, Deer Creek, Nevada Co, G W Kinzer, 56 Mont. Block.  
 Norman, gold and silver, Raymond Dis. T J Owens, 1 Brnory Hall.  
 Nellie & Julia, Copper, John C Hall, 218 Montgomery street.  
 Nutty Farnham, gold and silver, Reese River, Wm, J Whipple, 625 Merchant street.  
 North Bamboo, Mono county, C H Watson, 528 Montgomery street.  
 Nelson Mining Co., Inyo district, Owen's River, M H Farman, 526 Merchant street.

Occidental Gold & Silver Mining Co., Silver mount, Mono Co., E C Lovell, 436 Jackson St.  
 Ottawa, gold and silver, Devil's Gate District, Isaac Tabor, Armory Hall.  
 Olympic, g and s, Reese River, E C Palmer, Government House.  
 Ophir of the Colorado, No 1. G & S Mining Co., Colorado, Arizona, R Clarke, 40 Met. Bk.  
 Ossipee, gold and silver, R O Sturtevant, 612 Montgomery St.  
 Ophir Mountain, g and s, Slate Range Dist, J B Russell, 410 Montgomery street  
 Orleans Quicksilver, Lake county, H C Kibbe 542 Sac. street  
 Ophir, silver, Virginia district, Thos J Lamb, Room 1 Express building.  
 Os cola, gold and silver, Silver City, C W Evans, San Antonio, Alameda.  
 Occidental Mining Co, Emma Frances district, J H Gager, Montgomery street.  
 Orio, Mining Co, Santa Cruz Co, Geo H Kohler, 526 Montgomery street.  
 Oriental, gold and silver, Virginia City, John I. Leconey, Virginia City.  
 Oneida, gold and silver, Mono county, E Daniels, Express Building.  
 Oregon, gold and silver, Reese River district, 228 Front street.  
 O'Donohue, gold and silver, Esmeralda district, T Piteroff, 617 Clay street.  
 Oriental, gold and silver, Monitor district, T J Owens, 1 Armory Hall.  
 Owens River, gold and silver, Ira Manson, 417 Montgomery street.  
 Omega Mining Co, Gold Hill district, L D Inzold, y, 80 Merchant street.  
 Oriole, gold and silver, Esmeralda district, Thos Letson  
 Occidental, copper, Soledad district, E Barry, 636 Sacramento street.  
 Oro Fino, gold and silver, Reese River district, M L McDonald, 34 Metropolitan block.  
 Overland, silver, Reese River district, A S Gould, 528 Clay street.  
 Omaha, copper, Campo Seco, H C Kibbe, 542 Sacramento street.  
 Olive City, copper, La Paz, Thos Brownjohn, 621 Clay street.  
 Owens' River, gold and silver, Inyo district, Tulare Co, E C McComb, 621 Clay street.  
 Oneida, gold and silver, Gold Hill district, F Vasault, Barron's building.  
 Owen's River Canal Co., W F Hitchcock, 328 Montgomery street.

Princeville, gold and silver, Esmeralda, J P Cooledge, Aurora.  
 Pacific Quicksilver, Lake county, H C Kibbe, 542 Sac. street  
 Princess, g and s, Colorado Dist, Arizona, R Clark, 40 Metropolitan Block.  
 Pine Hill, copper, Bear River Dist, Nevada county, J H Culver, 43 L street, Sacramento  
 Polar Star, gold and silver, Jas M Swift 617 Clay St.  
 Palmetto, gold and silver, W F Hughes, 305 Montgomery street  
 Penola, gold, silver and copper, Geo. A Ball, 517 Clay street  
 Pacific Land Co., Oregon, Joseph C Ford, 607 Washington street.  
 Patten, gold and silver, Humboldt, J F Miller, 607 Washington street.  
 Poinexter G. & S. Mining Co., Colorado District, Wm Hollis, 410 Montgomery street  
 Potsdam Consolidated M. Co., Humboldt, R N Van Brunt, 706 Montgomery street.  
 Potosi, gold and silver, Virginia district, J F Lightner, Metropolitan block.  
 Pride of the Antelope, gold and silver, Esmeralda district, ———, Aurora.  
 Porter, gold and silver, Lamb Ledge R C Page, 420 Montgomery street.  
 Philadelphia, gold and silver, Slate Range, district A H Clark, 522 Montgomery street.  
 Pena, silver, San Antonio, L C Wm. Faulkner, 411 Clay street.  
 Peytona, gold and silver, Virginia district, C Stevens, 6 Parrot's building.  
 Polar Star, gold and silver, Esmeralda district, M B Ashim, Sacramento.  
 Peerless, gold and silver, Buena Vista district, A L Chamberlin, 413 Montgomery St.  
 Pioneer, silver, Washoe district, Wm A M Van, Bokolen, Virginia City.  
 Pacific, gold and silver, Mono Co., H R Reed, 321 Washington street.  
 Portland, silver, Aurora, Geo Bower, Montgomery street.  
 Pride of Esmeralda, gold and silver, Esmeralda district, J F Bailey, 605 Sacramento St.  
 Paul Thompson, gold and silver, Esmeralda district, George Bower, Montgomery street.

Pond, gold and silver, Esmeralda district, T W Colburn, 10 Express Building.  
 Pioneer Coso, Coso district, E B Holme, 712 Montgomery street.  
 Pride of Wide West, Esmeralda district, John Crowley, 428 Montgomery street.  
 Prospero, gold and silver, Humboldt district, V B Post, Lucas & Turner's building.  
 Pride of Ophir, Esmeralda district, Thos Brownjohn, 621 Clay street.  
 Popite, silver, Dev's Gate district, Gomer Evans, 338 Montgomery street.  
 Pine Nut Consolidation, silver, Reese River district, A S Gould, 528 Clay street.  
 Pilot Hill Consolidation Mining Co, Greenwood district, D F Verdonal, 636 Clay street.  
 Plutona, gold and silver, Devil's Gate district, J L Pool, 540 Washington street.  
 Prince Imperial, gold and silver, Calaveras Co, J Woodthorpe, 326 Clay street.  
 Pride of the West Mining Co, Silver City, L D Ingoldsbey, 80 Merchant street.  
 Pacific Star Con, gold and silver, Star district, L L Pool, 540 Washington street.  
 Piney Creek, gold, silver and copper, Mariposa Co, Jos. Dardano, Lucas & Turner's Bdg.  
 Palmyra Consolidation, gold and silver, Palmyra district, C W Curtis, 606 Montgomery st.  
 Pensacola, gold and silver, Esmeralda district, J H Holme, 712 Montgomery Block.  
 Poor Man's Mining Co, Prince Royal district, W Sparrow, 543 Clay street.  
 Puritan, gold and silver, H B Congdon, 621 Washington street.  
 Pride of Washoe, gold and silver, Washoe district, Wm E Mondy, 706 Montgomery street.  
 Providence, gold and silver, Nevada Co, J M B. fington, 12 Government House.  
 Pioneer Mill and Mining Co, Reese River district, L D Ingoldsbey, 80 Merchant street.  
 Parker Tunnel, gold, Esmeralda district, A S Gould, 528 Clay street.  
 Princess Royal, gold and silver, T C McCallan, 617 Clay street.  
 Peninsular Mining Co, Lower California, D A Jennings, 606 Front street.  
 Plymouth Quar z Mining Co, Kelsey district, L D Ingoldsbey, 80 Merchant street.  
 Pacheco, gold and silver, Reese River, C E Buckingham, 607 Clay street.  
 Pennsylvania, gold and silver, Silver Mountain, W H Martin, 810 Montgomery street.  
 Patrick Henry, gold and silver, Esmeralda, P S Fay, 616 Front street.  
 Pioneer, copper, Monte Diablo, Thos. Wallace, 1 Armory Hall.  
 Paris Consolidation, New Esmeralda, C E Buckingham, 607 Clay street  
 Pacific, gold and silver, Humboldt, J L Pool 528 Washington street.  
 Pine Bush, gold and silver, Reese River, W W Knight, 230 Front street.  
 Passaic, gold and silver, Reese River, W W Knight, 230 Front street.  
 Paton Ronje silver, Reese River, David Wilder, 522 Montgomery street.  
 Progress, silver, Reese River, David Wilder, 522 Montgomery street.  
 Patschin, g & s Pa myra district, N. T., J F N. smith, 502 Montgomery street.  
 Paris gold and silver, Gold Hill, N. T., S P Howes, 42 & 43 Government House.  
 Philadelphia, gold and silver, A H Clarke, 522 Montgomery street.  
 Peck, gold and silver, Esmeralda, R Clark, 40 Metropolitan Block.

Quincy Mining Co, Plumas Co. ——— Quincy, Plumas Co.  
 Queen of the West, gold and silver, E E Phillips, Gold Hill.  
 Quaker City Little Giant, gold, silver and copper, Clayton district, W L Kirby, 611 Clay st.  
 Quartz Mountain, gold and silver, El Dorado Co, F W Gross, 476 Jackson street.  
 Queen of the West, Reese River district, T Brownjohn, 621 Clay street.  
 Rubicon, Nos 1, 2, 3 and 4, Mono county, Keyes dis., J P Van Hagan, 14 Governmt h use  
 Romelia mining Co., Contra Costa Co., J W Crosley, 9 & 10 Government House.  
 Red Jacket, mining Co., Contra Costa county, J W Crosley, 9 & 10 Government House.  
 Red Rock, G & S, A O Tietman, 64 Clay St.  
 Rosario, gold and silver, Palmyra Dist, Wm Willis, 712 Montgomery street  
 Ros & Ellen, copper, Garden Bar Dist, Placer county, J H Culver, 43 L street, Sacramento  
 Rock River, gold, Butte county Cal., H C Kibbe, 542 Sacramento street  
 Rose Spring, G, S. & C., Eldorado, G J Turner, 606 Montgomery Street.  
 Rogers, silver, Flowery district, John F Pope, 113 California street.  
 Real del Monte Con, gold and silver, Esmeralda district, S Pattee, 522 Montgomery street  
 Reese River, gold and silver, Reese River district, R N Van Brunt, 706 Montgomery st  
 Red, White and Blue, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery.  
 Rochester, gold and silver, Slate Range district, A H Clark, 522 Montgomery street.  
 Ruth Windsor, gold and silver, Esmeralda district, T L Bibbins, 305 Montgomery street.  
 Rhodes Dig. inge Quartz Mining Co, Esmeralda district, G Touchard, 414 Montgomery st.  
 Recorder, gold and silver, Storey Co, J S Davies, 18 Montgomery block.  
 Ruby, gold and silver, Star district, W H Martin, 617 Clay street.  
 Realito, gold and silver, Sonora, Mexico, W C Budd, 412 Sansone street.  
 Rip Van Winkle, gold and silver, Esmeralda district, M G Elmor, 528 Montgomery street  
 Rosebud, gold and silver, Esmeralda district, J M Burnett, 605 Montgomery street.  
 Rochester, gold and silver, Esmeralda district, Isaac Tabor, 7 Armory Hall.  
 Roanok, gold and silver, Esmeralda district, Jas Herrick, 605 Montgomery street.  
 Railroad, silver, Reese River district, A S Gould, 528 Clay street.  
 Rough and Ready, gold and copper, Nevada county, C W M Smith, 57 Gov. Building  
 Rhodes North Ex. Mining Co, Folsom district, L Mahee, 716 Montgomery street.  
 Rambler Mining Co, Slate Range district, Wm V Garvey, 619 Merchant street.  
 Rose Quartz Mining Co, Eagle and Washoe districts, Jas Herrick, 606 Montgomery street.  
 Rising Sun, copper, Clayton district, W S Kirby, 611 Clay street.  
 Red Butte Mining Co, Esmeralda district, W W Lawton, 400 Montgomery street.  
 Rose Spring Water and Mining Co, Coso district, W W Lawton, 400 Montgomery street  
 Royal Eagle and Cliff, gold and silver, J Krieg, 755 Clay street.  
 Ravenna, gold, Arizona Territory, Jules P Cavillier, 619 Washington Street.  
 Rose Spring, Hump of the Dip, Pilot Knob district, Cal. G J Turner, 606 Mtgomery street.  
 Richland, silver, Reese River, David Wilder, 522 Montgomery street.  
 Reese River Antelope, Reese River, David Wilder, 522 Montgomery street.  
 Ragas, gold and silver, Du angio, San Dimos dist, A W Scott, cor' Stuart & Folsom Sts.  
 Rock Creek, gold and silver, Placer county, P Everts.  
 Reese River, silver, Lander county, S P Howes, 42 & 43 Government House.  
 Red Jacket, copper, Del Norte county, I L Pool, 540 Washington street.  
 Rothschild, gold and silver, Sierra district, E H Field, 420 Montgomery street.

San Gabriel, gold, silver and copper, Carmen Island, L. C., J W Gould, 406 Montgomery St.  
 Sarah Frances, g and s, Wester Dis, F V Scudder, 6 Barron's Building.  
 San Francisco S. M. Co., Lower California, H C Kibbe, 542 Sacramento street  
 Santa Cruz, silver, Lower California, Mexico, A Marcus, 519 Montgomery street  
 Southern Rights, g and s, Reese River Mining Dist, 228 Front street  
 Schiler g and s, Gold Hill, A N. el, 607 Washington street  
 Salvador, gold and silver, Chas H Watson, 528 Montgomery street  
 Selbeck, copper, E F Bent, Sell ck Gallery's  
 Starlight, gold and silver, Humboldt, N T, J H Gager, Merchant St, Montg. Block  
 Silver Moon, gold and silver, E Jaudin, 523 Front street  
 Slate Range, Water Co, A H Clark, 522 Montgomery street  
 St. Charles and St Joseph, Humboldt, Chas. Lumbord, 528 Montgomery street  
 Stogome, G & S, Esmeralda, R Robinson, 636 Sacramento St.  
 Seneeca, G & S, Esmeralda, R Robinson, 636 Sacramento St.



- Santa Clara Tunnel and Mining Co., Esmeralda Dis., J H Smyth, 49 Metropolitan Block.  
 Sumner, gold and silver, Kern River, Cove district, J F Miller, 327 Montgomery street.  
 Suerto, copper, Carmen Island, Isaac Tabor, 7 Armory Hall.  
 St Charles, gold and silver, Reese River, Lander County, F H Rogers, 607 Washington str  
 St. Clair, gold and silver, R T Polk, 56 Metropolitan Block.  
 Southern Belle, gold and silver, Reese River, R T Polk, 56 Metropolitan Block.  
 St John, Coal co, Cal. and Nevada, H S Dalliba, 604 Montgomery st.  
 Sir Edward, gold and silver, Silver City District, J H Purkitt, 655 Washington st.  
 Shay, gold and silver, Silver City District, J H Purkitt, 655 Washington st.  
 Setting Sun, g. s. & c., Contra Costa co., J W Crosey, 9 & 10 Government House.  
 Sophie, gold and silver, Tuolumne county, J C Ford, 607 Washington street.  
 San Jose de Vantas Mining Co.  
 Summit Pass Mining Co. Tuolumne Co. T B Ludlum, 528 Clay St.  
 San Francisco, gold and silver, Slate Range district, G J Turner, 606 Montgomery street.  
 Sheba, gold and silver, Star district, R C Harrison, 6 Naglee's Building.  
 San Francisco, gold and silver, Colorado dis., H C Kibbe, 542 Sac. street, cor. Mont'y  
 South Son ra Mining Co. Esmeralda district, J M Burnett, 605 Merchant street.  
 San Carlo Exploring and Mining Co. Tulare Co. W W Lawton, 400 Montgomery street.  
 Schiller, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Salinas, gold and silver, Monterey, Geo E Whitney, 9 Montgomery Block.  
 South Potosi, gold and silver, Buena Vista district, J S Luty, 305 Montgomery street.  
 Scott Exploring and Mining Co. Humboldt district, L Franconi, Lucas & Turner's Bdg.  
 St. Charles, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Stonewall Consolidation, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street  
 Sunbeam, 1st SW Extension, Esmeralda district, T Brownjohn, 621 Clay street.  
 Siskiyou, gold and silver, Star Dis., C E Judd, 523 Mont'y St.  
 Snell Exploring and Mining Co. J H Titcomb, 610 Montgomery St.  
 San Francisco, gold and silver, San Francisco district, M G Elmore, 528 Montgomery st.  
 Smoky Valley, silver, Lander Co. A S Gould, 528 Clay str et.  
 Silver State Mining Co. Virginia district, J S Davies, 18 Montgomery Block  
 Salazar, silver, La Paz, Arizona, C I Eaton, over Keith's drug store.  
 Sweet Vengeance, gold and silver, A Vavilier, 610 Front street.  
 Soledad Pass, copper, J H Rutenburg, 442 Washington St.  
 San Francisco, silver, Potosi Ledge, N Shiverick, cor Montgomery and Clay.  
 Silver Mount, copper, Esmeralda district, S Pattee, 522 Montgomery street.  
 Saxondale, gold and silver, Esmeralda Dis., R. Clarke, 40 Metropolitan block.  
 South Hawley Mining Co. Virginia district, J F Pope, 113 California street.  
 Stella Mining Co. Virginia district, J S Davies, 18 Montgomery Block.  
 Sharon Mining Co. Virginia district, J S Davies, 18 Montgomery street.  
 Salambo, copper, Tuolumne, L Franconi, Lucas & Turner's Building.  
 San Rafael, gold and silver, Marin county, F H Rogers, 607 Washington street.  
 Stevenson-Kehoe Mining Co. Gold Hill, Wm Willis, 712 Montgomery street.  
 Stanislaus Union, gold and silver, H O Howard, 523 Montgomery street.  
 Sierra Consolidation, gold and silver, M F Hitchcock, 305 Montgomery street.  
 Sam Moore, gold, silver and copper, Clayton district, A B Graves, 412 Clay St.  
 Santa Rosa Mining Co. W D Robertson, 619 Mont'y St.  
 Sonora, gold and silver, Virginia district, L D Ingoldby, 80 Merchant street.  
 Santa Rosa, gold and silver, E Polhemus, 413 California street.  
 Scorpion, silver, Virginia district, W H Martin, 810 Montgomery street.  
 Sierra Nevada, silver, Virginia district, J H Brewer, 40 Montgomery block.  
 Silver City, gold and silver, Silver City, O Risdon, cor Battery and Bush.  
 Succor, gold and silver, Gold Hill district, R H Waller, 1 and 2 Montgomery block.  
 Shelton, silver, Argentine district, J S Davies, 18 Montgomery Block.  
 Sierra, silver, Genoa district, J F Pope, 113 California street.  
 St. Louis, gold and silver, Gold Hill district, J H Brewer, 40 Montgomery Block.  
 Silver City Quartz Mill Co. Silver City, E Bauer, 414 Washington street.  
 Santiago, gold and silver, Silver City, E A Breed, Lucas & Turner's Building.  
 Santa Rosa, gold and silver, Virginia district Nelson Hudson, 620 Washington street.  
 Sacramento, gold and silver, Virginia district, S W Moore, 408 California street.  
 Sam Wright, Esmeralda district, E Worth, 547 Washington street.  
 Sigel, gold and silver, Humboldt district, J H Gager, Merchant st., Montgomery Block.  
 Savage Mining Co. Virginia district, G B McAneny, 712 Montgomery street.  
 St. George, gold and silver, Virginia district, H Bigelow, cor Mont. & Sac. streets.  
 Slate Range, gold and silver, Slate Range district, A H Clark, 522 Montgomery street.  
 South Utah, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street.  
 Sol Lewis, gold and silver, Esmeralda district, John Crowley, 422 Montgomery street.  
 San Francisco, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 San Marcial, silver, Sonora, Mexico, R N Van Brunt, 706 Montgomery street.  
 Sacramento East, gold and silver, Slate Range district, W H Clark, 224 Montgomery st.  
 Sonora, gold and silver, Esmeralda district, H D Bequette, Aurora.  
 Sam Patch, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 Silver M. and, gold and silver, Grass Val., Nevada Co. John Armstrong, 610 Merchant St.  
 Strawberry, gold and silver, Esmeralda district, H D Bequette, Aurora.  
 Sutr., gold and silver, Virgin a district, J C Buhlin, B st. Virginia City.  
 Shoshone, silver, Lander Co. M J Newmark, 522 Montgomery street.  
 Sugar Pine, gold and silver, Tuolumne Co. S D Jones, Custom House.  
 Silver Age, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Soyopa, gold and silver, Sonora, Mexico, E B Vreeland, 528 Clay street.  
 San Jose, silver, Lower Mexico, J F Nesmith, 502 Montgomery street.  
 San. Fran. Tun. and Mining Co., Reese River, C. E. Buckingham, 528 Clay.  
 St. Clair, gold and silver, Esmeralda district, E Worth, 547 Washington street.  
 Schmelzter, silver, American district, M G Elmore, 528 Montgomery street.  
 St. George, gold and silver, Humboldt district, A L Chamberlin, 413 Montgomery street.  
 Silver Age, gold and silver, Virginia district, -- Mygett, Virginia City.  
 Saginaw Quartz Mining Co. Tulare Co. F W Gross, 436 Jackson street.  
 Sailor, gold and silver, Blue Mountain district, H Dreschfeld, 24 Naglee's Building.  
 Syren, gold and silver, Calaveras Co. Leon Maubec, 716 Montgomery street.  
 Suburban, gold and silver, Mission Dolores, M Calkin, 326 Clay street.  
 Seneca, gold and silver, Santa Cruz Co. M Calkin, 326 Clay street.  
 Saratoga, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Silver Light, gold and silver, Gold Hill district, F Vassault, 4 Barron's Building.  
 South Esmeralda, gold and silver, Esmeralda district, Wm V Garvey, 619 Merchant street.  
 San Francisco, silver, Reese River district, A S Gould, 528 Clay street.  
 Silver Wedge, gold and silver, N Shiverick, cor Montgomery and Clay.  
 Silver Star, gold and silver, Virginia district, W E Moody, 706 Montgomery street.  
 San Antonio, silver, P Van Pelt, 310 Sansome street.  
 Soledad, copper, Soledad district, E Barry, 636 Sacramento street.  
 Silver Age, gold, silver and copper, Humboldt district, E Flanagan, 8 Naglee's Building.  
 San Lorenzo, gold and silver, Santa Cruz Co. M Calkin, 326 Clay street.  
 Star Light, gold and silver  
 Silver Butte Consolidated Silver Mining Co. Silver Butte dis. M G Elmore, 528 Montgomery.
- San Mateo Copper and Cannel Coal Mining Co., San Mateo and Santa Clara.  
 Soledad Hill, copper, Los Angeles county, Jule P Cavillier, 619 Washington street.  
 Stuart Anderson, gold and silver, Reese River, W J Whipple, 625 Merchant street.  
 San Francisco, silver, A H Clark, 522 Montgomery street.  
 San Francisco, gold and silver, Argentine district, N. T., A Pichou, 629 Clay street.  
 Salvatierra, silver and copper, Catalana Island, S P Howes, 42 & 43 Government House.  
 San Patricio, silver and copper, Carmen Island, S P Howes, 42 & 43 Government House.  
 South Genesee, Lyon coun y, N. T., W G Dean.  
 Star of Hope, g & s Silver Mountain, J F Nesmith, 502 Montgomery street.  
 Sonoma Ledge, silver, Reese River, David Wilder, 522 Montgomery street.  
 Sierra Morena, gold and silver, David Wilder, 522 Montgomery street.  
 Shanandoah, gold and silver, Esmeralda, J F Bailey 605 Sacramento street.  
 San Mateo, C M Conro, 623 Montgomery street.  
 Seneca Mining Co., Virginia district, J Fowler, 326 Clay s'reet.  
 Stanislaus, copper, Calaveras county, S C Pettinos 5 Armory Hall.  
 St Louis, gold and silver, Gold Hill dist ict, Humboldt, J F Pope, 115 California, street  
 San Bernard, silver, Star district, L Shearer, 13 Metropolitan Block.  
 Shoshone, silver, Lander county, N. T., M J Newmark 522 Montgomery street.  
 Siomite, gold and silver, Reese River, W T Reynolds, 423 Front street.  
 Silvan, gold and silver, Contra Costa county, G F Kohler, 528 Montgomery street  
 Shelton' silver, Post Ledge, Argentine district, J S Davis, 17 Montgomery Block.  
 San Dimas, gold and silver, Reese River, C E Buckingham, 528 Clay street.  
 South Locomotive, gold and silver, Esmeralda, C E Buckingham, 607 Clay street.  
 San Pablo, gold and silver, Reese River, C E Buckingham, 528 Clay street.  
 Santa Rosa, Sonoma county, W D Robertson, 619 Monzomery street.  
 Suction, Post Ledge, Argentine district, J S Davis, 17 Montgomery Block.  
 South Genesee, W E Dean, 53 Montgomery Block.  
 Sebastopol, go'd and silver, R N Van Brunt, 706 Montgomery street.  
 Spring Ledge, gold and silver, Esmeralda, R Robinson, 636 Sacramento street.  
 San Banardino, gold and silver, F Vassault, Barrons Building.  
 Silver Cloud, gold and silver, Reese River, W T Reynolds 423 Front street.  
 Steptoe, gold and silver, Reese River, C E Buckingham, 528 Clay street.
- Thompsons, gold and silver, Simpson's Park district, R T Polk, 56 Metropolitan Block  
 Toronto, gold and silver, Argentine District, J H Purkitt, 655 Washington st  
 Teoripa Mining Company, T B Bigelow, corner Jackson and Front  
 Tranquillon, g. s and c. J F Lohse, 430 Jackson street  
 Tellurium, gold and silver, W H Martin, 617 Clay street  
 Tajo, g and s, A G Stiles, 212 California street  
 Tennessee, gold and silver, Esmeralda district, J H Blood, 7 Montgomery Block.  
 Tucker, gold and silver, Esmeralda district, P B Cornwall, 608 Merchant street  
 Triunfo, gold and silver, San Antonio, L C, H S Brooks, 536 Clay street  
 Tigre of Colorado, gold and silver, Durango, Mexico, E W Newman, 737 Union street  
 Teclattacup, gold and silver, Colorado district, E B Holmes, 712 Montgomery street  
 Third South Utah, gold and silver, Esmeralda district, Mo es Frank, 609 Clay street  
 Tri-Union, gold and silver, Flowery district, N Shiverick, cor Montgomery and Clay  
 Tucker Tunnel Co. Esmeralda district, P B Cornwall, 608 Merchant street  
 Transmontane, Star district, W E Moody, 706 Montgomery street  
 Toquima, silver, Reese River district, A S Gould, 528 Clay street  
 Tulare Mining Co. Inyo Dist., Tulare county, Rodney Clark, 40 Metropolitan Block.  
 Telegraph, gold and silver, Excelsior district, Wm V Garvey, 619 Merchant street  
 Tampilais, Marin Co. S B Rooney, Government House  
 Triton, gold and silver, Virginia district, W E Moody, 706 Montgomery street  
 Tesora, gold and silver, Lower California, H E Kibbe, cor Sansome and California  
 Table Mountain, copper, Calaveras Co. M G Elmore, 528 Montgomery street  
 Texas, gold and silver, Cedar Hill district, J G Libby, Virginia City  
 Tescalamo Mining Co. Lower California, J H Blood, 7 Montgomery Block  
 Telegraph, gold and silver, Silver mountain, T J Owens, 1 Armory Hall  
 True Delta, copper, Del Norte Co. John F Pope, 113 California street.  
 Totowah Tunnel Co., Reese River, H B Chambers, 619 Washing ton street.  
 Thunderer, gold and silver, Esmeralda, R Robinson, 636 Sacramento street.  
 Tierra del Fuego, gold and silver, Esmeralda, R Robinson, 636 Sacramento street.
- Utah, gold and silver, Flowery district, J H Gilchrist, Virginia City  
 Utah Mining Co. Esmeralda district, ——— Aurora  
 Union Consolidated, gold and silver, Russ district, C S Higgins, 410 Montgomery street  
 Union Tunnel Co. Esmeralda district, A J Simmons, Aurora  
 United States, gold and silver, Virginia district, S B Rooney, 8 Government House  
 Uncle Sam, gold and silver, Silver Mountain, T J Owens, 1 Armory Hall  
 Union No. 2, gold and silver, Rees- River district, 228 Front street.  
 Union, gold and silver, Russ district, J B Russell, 410 Montgomery street  
 Utah Consolidated, gold and silver, Reese River district, T Brownjohn, 621 Clay street  
 United Ledges, gold and silver, Silver Hill district, E Flanagan, 8 Naglee's Building.  
 United States Mining Company, Virginia, S B Rooney, 11 Government House.  
 United, g. s and c, J P Van Hagan, Government House  
 Empire, gold and silver, Sierra Dist, Humboldt M M Barker, 406 Montgomery street  
 United Cosmopolitan, gold and silver, French Corral, A Marcus, 519 Montgomery street  
 Ural, gold and silver, Aurora, Esmeralda, W H Watson, 630 Montgomery street.  
 Utica, Calaveras county, J T Boyd, 603 Clay street.  
 Upper Lander, gold and silver, Reese River, W W Knight, 230 Front street.  
 Utica, gold and silver, Esmeralda, G L Walrath, 528 Montgomery street.  
 Union 34, copper, W H Miller, 420 Montgomery street.  
 U. G. gold and silver, W L Higgins, 630 Montgomery street.  
 Union, g & s Gold Hill, Transfer Office 502 Montgomery street, J F Nesmith.
- Valley, gold and silver, Buena Vista dist., Humboldt, G Falkenstein, 426 Montgomery st.  
 Valparaiso, g, C F Mebins, cor. Clay and Front streets  
 Vetu Gran'a, Arizona, W H Mills, 606 Montgomery St.  
 Victoria, g and s, Humboldt Hill, Esmeralda Dist, Theodore Wetzel, 629 Clay street  
 Virginia Hill, gold and silver, Virginia district, H Butenoss, Virginia City.  
 Vibbard, gold and silver, Esmeralda district, Jas Neary, 320 Clay street.  
 Villarino Mining Co. Lower California, J D Creigh, cor Montgomery and California.  
 Virginia Rogers Mining Co. Nevada Territory, E B Holmes, 712 Montgomery street.  
 Vulcan, gold and silver, Coso district, J H Gager, Merchant st., Montgomery Block.  
 Vesuvian, gold and silver, J P Nourse, Lucas & Turner's Building.  
 Veatch, silver, Simpson's Park, E B Holmes, 712 Montgomery street.  
 Venus, gold and silver, Buena Vista district, J L Pool, 540 Washington street.  
 Victor Hugo, gold and silver, Humboldt district, E Flanagan, 8 Naglee's Building.  
 Victoria, gold and silver, Esmeralda district, T Brownjohn, 621 Clay street.  
 Ventana, gold and silver, Durango, A W Scott, corner Stuart & Folsom streets.  
 Vietorine, gold and silver, Humboldt Hill, T Wetzel, 629 Clay street.



Vivian, gold and silver, Blue Sulphur Springs H S Fitch, 426 Montgomery street.  
 Woolsey, gold and silver, Gold Hill, Edward C Lovell, 436 Jackson street.  
 Wide Awake, gold and silver, Cinnabar dist. Humboldt, G Falkenstein, 426 Montgomery st  
 Webster G & S Mining Co., Esmeralda, Wm T Atwood, 224 Montgomery street.  
 Winona, g and s, M G Elmore, 528, Montgomery street  
 Webster, g and s, Humboldt Dist., N T, H C Kibbe, 542 Sac. street  
 Washoe, gold and silver, Gold Hill district, D A Jennings, cor Jackson and Front.  
 Washoe Manufacturing and Mining Co. Marysville.  
 Wide West Mining Co., Esmeralda district, Coll Dean, 325 Montgomery street.  
 White & Ma phy, gold and silver, Virginia district, J P Nourse, Lucas & Turner's Bdg.  
 White Cloud, gold and silver, Virginia district,  
 Willow Springs, gold and silver, Coso district, J H Sayre, 407 Montgomery street.  
 Wyoming, gold and silver, Esmeralda district, P B Oppenheimer, Aurora.  
 Wm. Penn, gold and silver, Devil's Gate district, Henry Toomey, cor California and Mont.  
 Washington, gold and silver, Slate Range district, W H Clark, 224 Montgomery street.  
 Winnemucca 1st Extension, gold and silver Silver Hill district, J T McMahon, Silver City.  
 Worden, gold and silver Monitor district, C H Wakelee, 612 Merchant street.  
 Winoschick, gold and silver, Coso district, V B Post, Lucas & Turner's Building.  
 Washington, gold and silver, Great Eastern Ledge, L F Yates, Virginia City.  
 Wilson, copper, Garden Bar district, Geo Bowen, 610 Clay street.  
 Washington, gold and silver, El Dorado Canon, T G Murphy, Virginia City.  
 Wm. Penn, gold and silver, Monitor district, A L Chamberlin, 413 Montgomery street.  
 Masson Consolidated, gold and silver, Reese River, J Horrick, 606 Montgomery.  
 Washington, g, s and t, Boi ing Springs district, C Gardner, 3 Barron's Building.  
 Wisconsin, in gold, Virginia district, Jabish Clement, Metropolitan Block.  
 Wm. B. Astor, gold and silver, Gold Hill district, J T Steele, Virginia City.  
 Warren, gold and silver, Excelsior district, Wm V Garvey, 619 Merchant street,  
 Washington, copper, Tuolumne Co. H L Brooks, Government House.  
 White Cloud, gold and silver, Star district, T Wallace, 1 Armory Hall.  
 Wyandott and Chrysopolis, gold and silver, Garibaldi district, E Flanagan, 8 Naglee's bdg.  
 Winters, g & s, Argentine D strict, C W Jones, 32 and 33 Montgomery Block.  
 White Horse, g & s, Humboldt county, H S Dulliba, 604 Montgomery street.  
 Washington, gold and silver, Silver mountain, T J Owens, 1 Armory Hall.  
 West End, gold and silver, Silver mountain, T J Owens, 1 Armory Hall.  
 White Cloud, gold and silver, Star district, T Wallace, 1 Armory Hall.  
 Wisconsin Tunnel Company, Reese River, W W Knight, 230 Front street.  
 Weaver, gold and silver, Colorado district, J Landsberger, 35 Front street.  
 Willamette, gold and silver, Reese River, C G Buckingham, 607 Clay street.  
 Whitlatch, gold and silver, Reese River, 228 Front street.  
 Webster, gold and silver, Lander county, T Wetzel, 629 Clay street.  
 Washington gold and silver, Clayton district, Alfred Myers, 525 Merchant street.  
 William Tell, gold and silver, Tuolumne county, A Pichou 629 Clay street.  
 Whitman, gold and silver, T W Colburn, No 10 Express Building.

Young Winnemucca, gold and silver, Esmeralda district. Aurora.  
 Yellow Jacket, silver, Gold Hill district, E Caldwell, Gold Hill.  
 Yreka, gold and silver, Esmeralda district, C W Curtis, 606 Montgomery street.  
 Yarrowburgh, silver, El Paso district, E Barry, 636 Sacramento street.  
 York River, gold and silver, John Gorman, 423 Battery street.  
 Young America Ocher, gold and silver, Amador Co G J Turner, 606 Montgomery street.  
 York River, Reese River, John Gorman, 423 Battery street  
 Ypsilanti Mining Companp, D A Mc Donald, 311 Market street.  
 Yuba, gold and silver, T C Mc Cullan, 622 Clay street.  
 Yolo San Bernard, gold and silver, Reese River, Wm J Whipple, 625 Merchant street.  
 Zouave, gold and silver, C B Hart, 15 Metropolitan Block.

**Silver Butte Consolidated Silver Mining Company.**—The regular annual meeting of the Silver Butte Consolidated Silver Mining Company will be held at the office of the Company, No 528 Montgomery street, on FRIDAY EVENING, October 30, 1883, at 7 1/2 P. M., for the election of officers for the ensuing year. A punctual attendance is requested.  
 By order of the board of Trustees.  
 M. G. ELMORE, Secretary.  
 San Francisco, September 29, 1883 oct12

**Emmet Copper Mining Company.**—Notice is hereby given that at a meeting of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No 528 Montgomery street, San Francisco, October 1, 1893, an assessment of twenty cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to T. LYONS, Superintendent, Copperopolis.  
 By order of the Board of Trustees.  
 oct12 M. G. ELMORE, Secretary.

**Wide West Copper Mining Company, Office,** 528 Montgomery street, San Francisco, September 10, 1883—Notice is hereby given that an assessment of twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, and payable immediately in U. S. Gold Coin, to the Secretary, at the office of the Company, or to J. M. Pike, Superintendent, at Copperopolis.  
 By order of the Board of Trustees.  
 sep14 M. G. ELMORE, Secretary.

**Bald Eagle Gold Mining Company,** Gold Flat District, Nevada County, Cal.—Notice is hereby given that a assessment of Twenty five cents per share has this day, (September 9th, 1883), been levied by the Board of Trustees on the Assessable Stock of the above named company, and payable immediately in United States Gold Coin to the Secretary at his office, or to T. S. Smith, Superintendent, Grass Valley, Nevada Co. By order of the Trustees.  
 T. L. BIBBINS, Secretary, 105 Montgomery Street.  
 sep13im

**Notice is hereby given that an Assessment** of ten (10) cents per share on each and every share of the Capital Stock of the Buena Vista Gold & Silver Mining Company—Fort Pitt Ledge, Prince Royal District, Humboldt County, Nevada Territory—was this day levied, payable immediately in U. S. gold coin, to the Secretary at No 413 Montgomery street, San Francisco.  
 By order of the Board of Trustees  
 H. B. MINOTT, Secretary.  
 September 22, 1883. sep28

## MINING & SCIENTIFIC PRESS.

### THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1882. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings, of new inventions, etc., prepared expressly for its columns. This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

**The Inventor!**  
 Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietors having had great experience as Patent Agents, together with facilities at Washington that enable them to obtain Patents with dispatch.

**The Mechanic and Manufacturer!**  
 Will be greatly benefited by its perusal, as its columns will from time to time contain original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

**Terms.**  
 To mail subscribers.—Four Dollars per annum!  
**Club Rates.**  
 Five Copies for Six Months, \$9.  
 Ten Copies for Six Months, \$16.  
 Ten Copies for Twelve Months, \$30.  
 Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

**EWER & SMITH, Publishers,**  
 Room 57, Government House, Corner of Washington and Sansome streets, San Francisco.

**A. C. MORSE,**  
**Mining and Real Estate Agent,**  
 OFFICE: S. W. corner Pine and Silver sts., AURORA.  
**HAVING MADE ARRANGEMENTS** with MINERS: MARTIN ESQ., one of the principal stock brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District.

**Utica Gold & Silver Mining Company,**  
 Office, 528 Montgomery Street, San Francisco, Sept. 18, 1883.

Notice is hereby given, that in accordance with the laws of the State of California, and the resolutions adopted by the Board of Trustees of the Utica Gold and Silver Mining Company, Esmeralda District, there will be sold at Public Auction, at the office of the Company of Friday October 23, 1883, at 10 o'clock A. M., so many delinquent Shares of the Capital Stock of the Utica Gold & Silver Mining Company, standing in the names of the following named persons, as will be necessary for the payment of the assessment of ten cents per share, levied June 12, 1883, and two dollars per share levied August 10, 1883, together with cost of advertisements and expense of sale, unless said assessments with accruing charges are previously paid:

Names.	Certificates.	Shares.	Amount.
L. B. Lott,	No. 7,	20,	42.00.
G. L. Church,	" 19, 25,	20,	42.00.
G. H. Gray,	" 27, 31, 34,	40,	84.00.
J. F. Gilbert,	" 29, 32, 35,	180,	860.00.
	" 30, 33, 36,		
	" 37, 40, 43,		
F. A. Baker,	" 38, 41, 44,	180,	378.00.
	" 39, 42, 45,		
G. L. Church,	" 41, 53, 54, 55, 58,	35,	72.00.
Geo. Morrow,	" 62, 63,	15,	30.00
J. Meyer,	" 68,	5,	10.00.
J. Kansauer,	" 69,	5,	10.00.
	G. L. WALRATH, Secretary.		

San Francisco, Sept. 18, 1883. 1m

## Fire Hose! Fire Hose!! Fire Hose!!!

**J. P. D. WILKINS,**  
 The celebrated HARNESS MAKER of Stockton, makes FIRE HOSE, from the best material, and WARRANTED at a trial of the Weber Steam Engine Co., No 3, of the city of Stockton. This HOSE is manufactured at his establishment, and known to stand a pressure of 125 pounds to the square inch; as certified by the Chief Engineer.

**ALSO FOR SALE,**  
 All kinds of HARNESS and SADDLERY, at the lowest cash prices. REPAIRING done promptly, one door west of the Main Street stable. oct12

## Mining Shares For Sale

BY  
**O. A. ORANE,**

**Office 28 Government Block.**  
 475 Shares U. S. Mining Company, Virginia City.  
 910 Shares Granada Gold and Silver Mining Company Virginia Hill, Virginia City,  
 168 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.  
 20 Shares Mohave Mining Company, La Paz District, Colorado, N. M.  
 30 Shares Aspinwall Gold and Silver Mining Company, Devil's Gate District, N. T.  
 75 Shares Washington Copper Mining Company, Indian Bar, Tuolumne Co.  
 228 Shares Montezuma Gold and Silver Mining Company, Inyo District, Tulare Co.  
 90 Shares Owen's County Consolidated Gold and Silver Mining Company, Inyo District, Tulare Co.  
 50 Shares Crown Point Ravine Gold and Silver Mining Company, Virginia District, N. T.  
 10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California. sep28

**PATENT CLAIMS.**—We will furnish, on application, the claim of any invention that has been patented within the last fourteen years. The name of the patentee—date of patent, when known, and two dollars for copying should be sent.

**MODELS.**—Inventors will please attach to all models sent to us, their names and address, in a legible, permanent form, this will avoid confusion and prevent errors.

**DRAWINGS.**—We have highly talented and efficient Draftsmen, by whom drawings of every descriptions are executed in the best style of art, with promptitude, and at a moderate cost.

**WANTED**  
 By a competent person, the Secretaryship of four Mining Companies. Books to be kept at the Office of the Mining and Scientific Press, No 57 Government House. Enquire as above. oct5

**AGENTS WANTED.**  
 We want a good Agent in every city, town and settlement, on this Coast. Applicants will send their names with reference, when specimen numbers of the **Mining & Scientific Press** will be forwarded to them; and their names added to our published "List of Agents." **EWER & SMITH.**

**PARTNER WANTED.**  
 The Proprietor of one of the oldest and most profitable country newspapers in the State is desirous of taking in a partner. He wants to dispose of one-half of his office to some gentleman well calculated to take charge of the editorial department, as he is a practical printer himself. For further particulars enquire at this office. oct4

**NORTH BEACH QUARTZ MILL**  
 and  
**REDUCTION WORKS**  
 Are prepared to work Gold and Silver ores, in large or small quantities.  
 Working assays made of small lots, and all kinds of ores crushed at short notice.  
 Our new and complete Machinery, will enable us to give results fully up to the merits of our rock.  
**WHEELER & THAYER, Proprietors,**  
 C. C. JONES, A. amalgamator.  
 San Francisco, Oct. 13, 1883.

**Dona Carolina Gold and Silver Mining Company.**—Notice is hereby given that at a meeting of the Trustees of the Dona Carolina Gold and Silver Mining Company, held this day, an assessment (No. 2) of fifty cents per share, on each and every share of the capital stock of the company, was levied payable on or before October 1, 1883, in U. S. gold coin, to the Secretary at the office of the company.  
 The regular annual meeting of the stockholders of the company will be held at their office, **MONDAY EVENING, November 1, 1883, at 7 1/2 o'clock.**  
 By order of the Board of Trustees.  
 M. G. ELMORE, Secretary.  
 San Francisco, September 29, 1883 oct19

**Ruth Windsor Tunnel Company, Esmeralda district.**—Notice is hereby given that an assessment of fifty cents per share was levied on the capital stock of the above company on the 24th day of September, 1883, payable immediately to the Secretary at his office in United State gold coin.  
 By order of the Trustees.  
 T. L. Bibbins, Secretary, 305 Montgomery St. San Francisco, October 13, 1883.

## New Patent Agency.

**WE HAVE CONNECTED WITH THE**  
 Publication of the "MINING AND SCIENTIFIC PRESS"  
**The Patent Agency Business,**

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency**  
 The most desirable place to make application for Letters Patent on the Pacific coast. Apply at  
 Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. **EWER & SMITH.**

**FOREIGN PATENTS OBTAINED**  
 By application at this office, Room 57 Government House, **EWER & SMITH, solicitors.**

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. **EWER & SMITH.**

## PATENT RIGHTS.

**Patent Rights Bought and Sold,**  
 At the office of the "Mining and Scientific Press" Agency **EWER & SMITH.**

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. **EWER & SMITH.**

## MINING LAWS AND FORMS

**JUST PUBLISHED BY H. H. BANCROFT**  
 J & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Courdon. 12 mo., flexible cloth, \$1.50. For sale at all the Bookstores. sep14

**R. W. MYERS, & CO.,**  
 Chases' New Mill, Fremont St., near Market;  
**JOB TURNING & SCROLL SAWING.**

**BRACKETS,**  
**RED WOOD BALUSTERS,**  
**NEWEL AND CEDAR BALUSTERS**  
 for Stairs.

**Manufacturers of every description of Oval, Circular and Square**  
**PICTURE & LOOKING GLASS FRAMES**  
 For the Trade at New York Prices.

**All kinds of Designs for Building.**  
**R. W. MYERS. H. C. SOMES**



## OUR MINING DIRECTORY.

We devote nearly the entire of to-day's issue to our Mining Directory. We have added to the list about 300 companies, removed about the same number of such as we have heretofore been giving by their titles only; their Secretaries not having considered their existence of sufficient importance to the public to hand in the locality of office, etc., for insertion in the Directory. In addition to the above changes, we have made several hundred corrections and changes—the most of which we have sought out by diligent enquiry.

ESMERALDA STOCK MARKET.

There is but little change in the Stock Market since the last report from this District.

The Lexington Ledge, on Last Chance Hill, is again being worked, the new shaft is down to a depth of 60 feet; the ledge is over six feet wide, and the rock increasing in richness. The company have about forty tons of rock taken out, lying at the shaft, ready to be crushed, so soon as a mill can be secured. The rock is said to be equally as rich as the Crckett or Western summit.

The work on the Clan Alpine Ledge, on Last Chance Hill is being prosecuted day and night; the shaft is now down to a depth of sixty-five feet, and the company are drifting on the ledge—fourteen tons of the rock crushed at Lake's mill, on Wednesday, yielded \$1,382. The company have declared a dividend of \$1.50 per share on the 38 tons of rock crushed at this mill. The work will be continued, but no more rock will be crushed until the present contract of this mill on the Pond rock is completed.

The Clan Alpine Company are sanguine that the next crushing on their rock will go over \$90 per ton.

We are compelled to defer our usual Mining Stock Report for the week. Considerable changes have taken place in the market, for which we refer to our usual lists of sales, for the week.

**SALES FOR THE WEEK ENDING OCT. 17, 1863.**

Opfir.....	912	Shares \$1670 @ \$2075	per foot
Fall s of Clyde.....	—	—	—
Great Western Tun.50	—	1	—
Josephine.....	197	11 @ 11½	—
Coso.....	—	—	—
Gould & Curry.....	16	4500 @ 4700	—
Savage.....	—	—	—
Chollar.....	—	—	—
Pride of Washoe.....	—	—	—
Bullion.....	54	50 @ 58	—
Esmeralda.....	—	—	—
Laurel Hill.....	—	2½	—
Willow Consul.....	—	—	—
Branch Mint.....	—	—	—
Die Vernon.....	25	14 @ 15	—
United Cosmopolit.....	—	—	—
Union, G. H.....	156	50 @ 55	—
Union, R. D.....	176	2 @ 2¾	—
Rhode's Diggins.....	—	—	—
Hale & Norcross.....	—	—	—
Uncle Sam.....	52	130 @ 150	—
Echo.....	—	—	—
Baltic.....	149	50 @ 54	—
El Dorado.....	38	70 @ 73	—
North Potosi.....	211	42 @ 53	—
Caledonia Tun. Co. 50	—	36 @ 42½	—
Independent, G. H.....	—	—	—
Silver Hill.....	45	19 @ 30	—
Garibaldi.....	—	—	—
Bodie Bluff.....	—	—	—
Willow Springs.....	10	7	—
Sheba.....	189	85 @ 90	—
De Soto.....	—	—	—
Monte Christo.....	—	—	—
Birdsall.....	—	—	—
Bob Black.....	—	—	—
Techattacup.....	—	—	—
Napoleon.....	—	—	—
Fellows.....	—	—	—
Potosi.....	8	1400	—
Yellow Jacket.....	8	1000	—
Imperial.....	—	—	—
Overman.....	13	500 @ 600	—
Best & Belcher.....	—	—	—
Sierra Nevada.....	35	97½ @ 105	—
Daney.....	124	90 @ 105	—
Burning Moscow.....	1065	250 @ 330	—
Charles Caney.....	5	15	—
Baltimore American.....	16	40 @ 45	—
North American.....	502	62 @ 75	—
Bullion (G. H.).....	—	—	—

Pride of the West.....	..	..	..
Spanish No 2.....	..	..	..
Norton.....	200	5½ @ 7¼	..
Bu nside.....	20	9	..
Adriatic.....	—	..	..
Iowa.....	—	..	..
Madison.....	313	23 @ 25	..
Buckeye.....	30	18 @ 20	..
Lucerne.....	—	..	..
Lady Byran.....	180	8½ @ 9	..
Mt. Davidson.....	50	3½	..
Cedar Hill Tunnel.....	—	..	..
North Ophir.....	—	..	..
Wide West.....	109	69 @ 79	..
Real Del Monte.....	10	470	..
Utah.....	17	60 @ 65	..
Pond.....	—	..	..
Grass Valley.....	6	60 @ 65	..
Michigan, G. H., ..	—	..	..
Ural.....	—	..	..
Bodie No 2.....	—	..	..
Blue Ledge.....	—	..	..
Napoleon, Copper.....	—	..	..
Oneida.....	—	..	..
St. George.....	—	..	..
Sacramento.....	—	..	..
Governor Nye.....	—	..	..
Table Mountain Cop.....	—	..	..
Diamond, R. R.....	—	..	..
Josephine, Copper.....	—	..	..
Melones.....	111	79 @ 110	..
La Crosse.....	20	30	..
Harrison, Vir. Dis.....	—	..	..

## REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending Oct. 17, 1863.

Names of Companies.	Shares per cent.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Latest Asking Price.
WASHOE STOCKS									
Ophir	12	\$300	1975	20 0	1960	1900	1635	1825	1900
Gould & Curry	4	500	4500	4650	4600	4575	4450	4450	4625
Savage	1	200	2500	—	2700	—	—	2500	3000
Chollar	4	500	97½	87½	—	—	—	800	875
Potosi	2	500	1400	1300	1400	1400	1200	1225	1500
Hale & Norcross	2	500	—	—	1200	—	—	—	1000
Sierra Nevada	1	500	90½	80	91	111	92½	94	97
Danney	4	500	97½	87½	—	90	90	—	191
Barling Moscow	2	100	250	280	265	275	285	270	275
North Potosi	1	300	48	43	49	47½	43½	42	44
Noradell	2	125	90	—	25	20	—	—	35
Charles Caney	1	30	15	13	14	—	—	15	15
Sacramento	1	500	45	—	—	—	35	30	55
Iowa	1	100	—	—	—	—	—	—	60
El Dorado	1	—	70	72	—	65	65	66	80
Norton	1	—	6½	4½	6½	7	6½	9	9
Burnside	—	—	8½	7½	9	8½	9	7	9
Adriatic	—	—	—	—	—	—	—	—	—
Brumley	—	—	—	—	—	—	—	—	—
Pride of the West	—	—	20	3½	26	—	—	10	50
G. H. Quarz M. Co.	—	—	—	—	—	—	—	—	—
Imperial	—	—	42½	420	—	—	—	—	465
Cedar Hill Tunnel	1	100	—	—	—	—	—	—	4
Mount Davidson	1	200	—	—	—	—	—	3½	4
Central	12	300	—	—	—	—	—	—	4
California	12	300	—	—	—	—	—	—	4
Rogers & F. D.	12	250	—	—	—	—	—	—	4
Lucerne	1	100	—	—	—	—	—	—	—
Lady Bryan	1	500	—	—	—	—	—	—	—
La Crosse	—	—	—	—	—	—	—	—	—
Moss	—	—	—	—	—	—	—	—	—
Porter	—	—	—	—	—	—	—	—	—
Crown Point	—	—	—	—	—	—	—	—	1200
Recreation	—	—	—	—	—	—	—	—	5
Hudson	—	—	—	—	—	—	—	—	25
Lady Ellen	—	—	—	—	—	—	—	—	60
Schiller	—	—	—	—	—	—	—	—	30
Seneca	—	—	—	—	—	—	—	—	60
Vesuvius	—	—	—	—	—	—	—	—	50
EMERALDA STOCKS.									
Elde West	1	600	66	66	60	60	83½	79	80
Antelope	1	500	120	—	140	—	145	—	400
Emeralda	1	1000	16	—	—	70	—	—	25
Real Del Monte	1	400	440	400	470	400	—	450	500
Utah	—	250	52½	50	55	—	55	50	60
Silver Hill	1	500	14	—	21½	15	19	—	30
Nevada	1	250	—	—	—	—	—	—	20
Federal Hope	1	—	—	—	—	—	—	—	—
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	—	—	—	—
Falls of Clyde	—	—	—	—	—	—	2½	2½	4
Subcam, s. w. ex.	—	—	—	—	—	—	—	—	—
Bamboo	—	500	—	—	—	—	—	—	50
Great West' Tun.	—	—	—	—	—	—	—	—	1
Burlington	—	—	—	—	—	—	—	—	40
El Paso	—	—	25	25	10	—	60	—	80
Crockett	—	—	—	—	—	—	—	—	—
Etna	1	100	—	—	—	—	—	—	—
COSO STOCKS.									
Josephine	2	250	11	11	11	10½	10	9½	11
Willow Springs	1	100	5	3½	7	7	—	—	8
Empire	—	—	—	—	—	—	—	—	25
Coso	—	600	10	10½	—	—	11	12	12
MEXICAN MINES.									
Mina Prieta	—	1000	—	—	—	—	—	—	40
Dios Padre	—	—	—	—	—	—	—	—	—
COPPER STOCKS.									
Napoleon	1	600	68	—	—	—	—	4½	75
Josephine	—	—	—	—	—	—	—	—	9
CALIFORNIA STOCKS.									
Laurel Hill	—	—	4½	4	—	3½	—	4½	12
Rhodes Diggings	—	—	—	—	—	—	—	—	35
Eureka	—	—	—	—	—	—	45	—	80
Fellowes	—	—	—	—	—	—	—	—	80
Rock River	—	—	—	—	—	—	—	—	50
Utica	—	—	—	—	—	—	—	—	80
HUMBOLDT STOCKS.									
De Soto	—	—	20	20	20	20	15	12	22
Great Basin	—	—	—	—	—	—	—	—	5

### ESMERALDA STOCK LIST

[Corrected for the Mining and Scientific Press, Oct. 16, 1862.]

	Bid.	Asked		Bid.	Askd
Alpine	\$8	10	Keeney	—	—
Albion	—	5	Liby Dale	10	26
Atlantic	5	—	Lily Dale	—	—
Arcade	6	10	Larry Byron	—	12
Aurora Tunnel	5	8	La Plata	—	12
American Freeman Tun'l	7	10	Lazze Lighton	2	6
Antelope	250	—	Middle Hill Tunnel	6	9
Atlas	20	—	Mah Emeralds	—	40
Brazo	—	20	Moura	—	20
Bodie Buff Consolidation	9	10	McKinstry Tunnel Co.	—	40
Bodie Peak, Bodie District	8	—	Monte Christo, Tunnel co.	—	40
Bright Star	—	16	Muzal	—	10
Bamboo	—	10	Mount Braley	—	10
Battle	10	20	Mary L Gardiner	—	125
Bullion (Van Horn Dist.)	8 1/2	10	Mary L. Tunnel	16	18
Bodie Buff, No. 1	3	10	Martinez Tunnel	8	8
Bodie Buff, No. 2	16	—	Meredith	—	16
Bunker Hill	5 1/2	10	North Willow Springs	—	30
Bonaparte, Tunnel comp.	—	—	New Emeralds Consol.	2	6
Cascades	—	—	Newton	—	—
Chimney	11	—	Nevada, (Tunnel)	—	10
Crockett	75	—	Ozark	—	40
Cape	—	6	Old Winnemucca	—	6
Cian Alpine	10	15	Paul Tunnel Co.	—	6
Cortes Consolidated	—	6	Pacific	—	—
Dane	10	15	Pond	—	—
Dawson	—	—	Prize of Antelope	10	10
Durbin	—	—	Prize of Antelope (Consolidated)	10	15
East Essex Ex. Ural	—	8	Prize of Antelope	—	15
Excelsior, Excelsior Dist.	20	—	Pennsylvania Tunnel Co.	—	—
Empire	20	25	Real Del Monte	410	450
Franklin Tunnel company	10	—	Red-brown	—	—
Fallstaff	—	—	Red, White & Blue	10	—
Fallstaff, Consolidation	—	—	Stanford Tunnel Co.	—	16
Fresno	12	—	Shower Valley	—	—
Falls of Clyde	8	—	Strawberry	—	—
Great Eastern	12	—	Silver Hill	60	60
Greater Hooker (Con.)	5	—	Silver Hill, Bodie District	15	—
Golden Gate	—	—	Seymour	10	—
Garibaldi	50	—	St. Louis	—	—
Golden Harvest	5	—	Tascan	—	—
Golden Cross	10	—	Tiger	—	15
Governor Seymour	25	—	Tucker	—	25
Golden Age	—	—	Tennessee	—	25
Grand Basin	5	—	Union Tunnel	20	30
Golden Era Tunnel Co.	—	—	Utah	—	150
Greenback	20	—	Ural proper	165	185
Hanover	10	—	Ural Extension	5	10
Howard Tunnel Co.	15	—	Willard	—	—
Heath	15	—	West West	—	—
Herman Consul	15	—	Washington Tunnel comp.	—	—
Horn Creek, Excelsior Dis	3	5	Western Summit	—	75
Juniata	10	—	Wyoming	15	25
			X-Eviza and Constantinople	—	—
			Consolidated	—	—
			Yancey	—	40
			Cortes, consolidated	6	10

### VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, Oct. 8, 1863.

Bid. Ask  
Virginia Mining District.

Ashtland.	\$	9	8	U. S. Tunnel.	—	—
Allen.	40	44	—	Ulab.	70	490
Atchison	—	—	—	United States.	5	5
Alturas.	3	6	—	W. Scott.	—	10
Belvidere.	20	22	—	Washington.	—	—
Birdall.	20	22	—	Yak.	3	4
Bajazet and Golden Era.	24	32	—	Zouave.	12	20
Burside.	12	20	—			
Burling Moscow.	110	130	—			
Bench-Paxton.	75	175	—			
Bloomington.	2	3	—			
Crescents (Buchanan).	—	250	—			
Cedar Hill Tunnel.	—	—	3			
Cole.	8	14	—			
Consolidated Cedar Hill.	15	20	—			
Dargan.	3	5	—			
Empire.	—	12	—			
El Dorado.	72 1/2	80	—			
Fairview.	200	225	—			
Grass Valley.	75	95	—			
Hazel Green.	—	—	—			
Harrisburg, Virginia.	60	75	—			
Harrisburg, Penn. Tran. Inco.	1	5	—			
Hendersou.	—	—	—			
Honduras.	15	15	—			
Indiana.	—	5	—			
Indus.	—	6	—			
Irving.	—	16	—			
Insurance.	12	13	—			
Iowa.	—	250	—			
Issaquia.	5	5	—			
Jadon.	5	5	—			
Juniata.	5	10	—			
Keystone.	25	25	—			
Kenosha.	15	15	—			
La Crosse.	40	45	—			
Laurel.	—	7	—			
Monte Cristo.	8	12	—			
Meredith.	45	50	—			
Michigan.	—	—	—			
Mashion.	8	8	—			
Mason.	10	12	—			
McBee.	—	25	—			
Milton.	30	50	—			
Monarch.	—	12	—			
Madison.	5	15	—			
Mohegan.	—	16	—			
Moray.	—	35	—			
McClellan.	—	175	—			
Moss.	—	15	—			
Morse.	2	20	—			
Oakland.	—	10	—			
Oriental.	3 1/2	8	—			
Oscuela.	8	10	—			
Old Virginia.	250	—	—			
Phoenix.	—	39	—			
Pride of Washoe.	—	12	—			
Peyton.	—	15	25			
Pioneer.	150	180	—			
Perserverance.	—	30	—			
Ponce de Leon.	1	4	—			
Rogers.	—	100	—			
Recorder.	8	10	—			
Santa Rita.	15	50	—			
Santa Fe.	35	40	—			
Sutro.	—	5	—			
Sierra Nevada.	5	90	—			
Sacramento.	60	80	—			
Shamrock.	—	10	—			
Sister.	—	17	—			
Sides.	450	700	—			
St. Helena.	—	15	—			
Seneca.	—	15	—			
Sierra Nevada.	90	—	—			
—	—	5	—			



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VI.

SAN FRANCISCO, MONDAY EVENING, OCTOBER 26. 1863

NO. 52.

## REMOVAL.

The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing more room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.

## THE ANTIOCH COPPER SMELTING WORKS.

We are informed that the California Copper Smelting Works are progressing favorably; of course the superintendant has to experiment to a certain extent upon some of the refractory materials used in the construction of some portion of the furnace. We are told, however, that so far everything looks like a complete success. The Company also seem to be satisfied with the obtained results, and a proof of that is, that another very large furnace is in the course of erection, and in about ten days will be ready for working. We see no reason whatever, why copper smelting will not be a safe and profitable investment as any in California. We have an abundance of coal which will answer the purpose of copper smelting without a doubt. Parties can obtain coal as cheap here as they can in most of the Eastern States; copper works and the copper ore are much cheaper. Our own requirements for copper will be pretty considerable, and is already quite large. We shall be pleased to see the California Copper Smelting Works supplying this demand. On the strength of this, other large manufactories will start into existence—such as the producing of the various copper impelments and apparatuses for manufacturing and domestic purposes. We can all look forward to the production of brass. The success of this enterprise cannot be over estimated, and it deserves the aid and good will of every Californian. Why cannot California supply the demand for copper of China and various other places. In such a large seaport, considerable sheathing will be required for ship bottoms, and cannot we expect the Antioch Copper Works to fill this want, at some day, early in the future. The Company will soon have a few tons of manufactured copper ready, although at present they have in view only the concentration of the ores, so that none may have their works assaying less than 50 per cent. of copper. When these works are in full working operation, copper mines that will not pay now, can be worked to an immense profit. Mines producing even five per cent. of copper will eventually pay. They would pay even now if parties were to put up machinery on their works, and dress their ores; and until this is done, copper mining can not be profitable in the majority of the mines of this State.

[From our Traveling Correspondent.]  
COPPEROPOLIS.

MR. EDITOR:—I have now commenced in earnest the business of my special mission; and as one of its principal objects was to collect all the information I could of this wonderful district, which might be interesting to the community at large, I shall begin with a short notice of the town itself. Copperopolis is situated some thirty-five miles above Stockton, a little south of east, six miles from the Stanislaus River, opposite the Central Ferry. The main travel, however, to Sonora and Columbia, and that section of the country, passes over — Ferry, where they are building a magnificent suspension bridge, at a cost I understand, of \$20,000.

The town stands upon a site admirably adapted for the large and important city it is destined soon to become. Its present dimensions, indeed, are quite respectable, considering it is only two years old. Amongst its principal buildings are Col. Manning's hotel, a large, commodious house, conducted admirably, and affording better accommodations than you get at Stockton; where, by the way, in this respect, they are sadly behind the times—the Catholic Church, Mr. Hardy's private residence, and the public works of the Union and Keystone mines. There are also two livery stables doing a good business, several large stores, Ice Cream Saloons, and about the usual amount of bars, though so far as I have seen, the people, for a mining town are very temperate.

The population, I believe, is about twelve hundred; amongst which the Cornish and Irish miners form quite an item. There are two schools, one public and one private, with about an equal number of pupils; and the general Sabbath-school, with an attendance of 60 children on an average. I do not know whether they have a resident minister, but as a matter of course, there's a Doctor and a Lawyer. The latter are inevitable everywhere. I was rather surprised to find the Protestant residents have not built a suitable place of worship, considering the population, and the permanency of the mines; but, at present, Divine Service is held in the public hall, a respectable building, standing in the centre of the town, which also answers for theater, ball-room, etc., as occasion requires.

The valley through which these rich and extensive copper deposits run, is surrounded with hills well timbered, and containing a soil capable of producing anything. The great drawback to agricultural pursuits at present, is the scarcity of water; but, to obviate this, a large company have commenced a tunnel into the high hill on the upper side of the town, with a view, principally to strike water, and, if successful, as no doubt they will be, then Copperopolis, in this respect, will very soon be a second Coloma, where every man sits literally "under his own vine and fig-tree."

## THE MINES.

To visit each mine separately as I intended, and to render my description intelligible to strangers at a distance, is a work of labor, consuming considerable time. I am however, making all possible progress, consistent with its importance, and, here perhaps, is the proper place to acknowledge the extreme politeness and consideration with which all parties treat me, and the assistance they afford. Whenever or

where I want to go, there's a buggy at command. At the fitting time, as in gratitude bound, I shall mention each party by name. On presenting friend Elmore's introduction to Mr. Pike, Wells, Fargo & Co's agent here, he arranged immediately to have a conveyance for me the following morning; when accompanied by Mr. Johnson and Col. Manning, we all started to visit the Massachusetts, but as this mine is not upon what is called the Copperopolis lode proper, I shall omit its description now in order to avoid confusion. At present I shall confine myself to those stretching from the town to the river, a distance of six miles, and give them, *seriatim*, as they follow in succession. First then comes

## THE UNION.

Of this claim I am unable to give any particulars as the authorities, for reasons best known to themselves, refuse admission. All I can say is, that a portion of it runs out from the town towards the river until it joins the

## EMPIRE.

This mine stands high. Their main shaft is about 110 feet deep. Its extent is 1,800 feet, containing twelve shares. At present they are not at work below, so I did not go down. In a short time, this will be one of the leading claims.

## CALAVERAS.

This mine follows in a direct line upon the main lode, and in the advancement of its works, stands next to the Union and Keystone. It is almost incredible, the amount of work done upon this claim. It contains 3,000 feet divided into twenty shares. The main shaft is about 110 feet deep. Over this shaft they have put a splendid little engine of 20 horse power, with 10 inch cylinder and 1½ feet stroke. The engine is intended for hoisting ore, and pumping. The pump will be a plain lifting pump about 8 inches in diameter. All these works will be completed very soon. The machinery was manufactured in Stockton, and reflects great credit upon the Globe Foundry. In sinking an air shaft, about 100 feet above the engine house; they recently struck a magnificent deposit of ore at 30 feet deep, which was reported at Stockton to contain 30 per cent. sulphurets. I forward three samples of this ore, for your cabinet collection, which I picked up this morning, out of a large pile equally good. For three long years, the owners have had untiring faith in this claim, and like all faith accompanied with good works, it will reap the final reward of success.

## COLUMBUS.

Yesterday Mr. Beardsly very kindly offered to drive me round. Our first visit was to the Columbus. This claim is only just opened. They do not expect to strike anything of consequence until 100 feet deep. They are now down about forty feet, with strong indications of good ore. The claim contains 2,400 feet divided into 16 shares. I think myself that thirty feet more of tunneling will make quite a difference in the value of this claim.

## PLYMOUTH ROCK.

This claim is also only opened. It consists of 2,500 feet, divided into 18 shares. They are down 40 out of 150 feet which they expect to have to sink. Indications good.

## COLYER.

Immediately opposite the Plymouth and adjoining is the Colyer, only a few hundred feet apart. Both are prospecting

THE ALTA CALIFORNIA Copper Mine is located in Del Norte County, about eighteen miles from a good shipping port. It was incorporated in 1860. It has an incline 250 feet deep, and is now shipping 20 per cent. ore. It is one of the most promising mines in that county.



for the main lode, with equal chances of success, as through this point it is difficult to guess the exact bearing. The Colyer takes the flat. The claim is 1,200 feet I believe. At present no work is going on, owing to the accidental death of Mr. Colyer, a short time since, from a premature explosion of a blast.

#### WEBSTER & ALTA CONSOLIDATED.

Next follow these two claims, also running parallel and directly opposite to each other, like the preceding. Neither are working below. The Webster people were driven out by water and are now driving a tunnel. The Alta suspended work from some misunderstanding about assessments. I did not learn the extent of the Webster; the Alta Consolidated is 3,000 feet, divided into 20 shares. Like the preceding two, no one can tell which will win the prize.

#### SAXON.

My ride with Mr. Beardsley terminated at this claim. It is also just commenced, being only 30 feet deep. It contains 2,400 feet, divided into 15 shares. Mr. Binnex, the Superintendent, is doing splendid work; he is both practical and intelligent. From indications, and bearings of the compass, the Saxon think they will come on the lode, when they get down 100 feet. I shall go down this shaft some other time. I am anxious to do so, because if they prove correct in their judgement and strike the Copperopolis lode, in what light are we to regard the splendid lead already developed by the Table Mountain claim, one fourth of a mile west of the Saxon, and the last in this line before reaching the river.

#### WIDE WEST.

Parallel with the Saxon, and adjoining the Table Mountain, is the Wide West. It contains 3,000 feet, divided into 20 shares. They calculate to sink 100 feet, and then drift East about 30 feet as directed by the Table Mountain, of which indeed, it is an extension. At present they are only down a few feet.

#### TABLE MOUNTAIN.

Although I visited this splendid mine on Saturday with Mr. Pike, this is the proper place to notice it, as on the Copperopolis range proper, it is the last claim toward the river from the town, in the direction I have so far taken. Although last mentioned, for many reasons, it is the first in importance. Table Mountain is between 5 and 6 miles from town, nearly south east, and about one mile from the Stanislaus river. The claim consists of 2,150 feet in 21 shares. They have two shafts, one 120, the other 40 feet deep. In the latter they have a magnificent lead 4 feet thick; in the former, they were some thirty feet east off the lead, from this they are now drifting and have about 10 or 12 feet more to go. They are working day and night—employing fourteens hands.

Out of the 40 feet shaft, they took 12 tons of No 1 ore. I sent you two splendid pieces of ore which I took from the bottom of this shaft. Apart from the richness of the lead developed in this shaft, it has importance from the fact, that it varies from the direct line of the Union lead taken by Professor Whitney, who invariably places the Saxon on the direct line. What then is the inference? That in instead of one direct copper lode, running through this valley, there are two, or else the Professor made a mistake of one fourth of a mile, and the Table Mountain, not the Saxon, is on the main lead. Whichever proves true in the end, it is at present of great consequence to the intermediate claims still undeveloped. I have, however, something further to say about the Table Mountain. It was a matter of notoriety on Montgomery street, before I left, that the Table Mountain stock was depreciated 15 dollars a foot, having fallen, I think, from 40 to 25 dollars. However this came about, personal observation assures me, it was a gross injustice. There is not a better developed lead, at 40 feet, in this district, than Table Mountain, and the samples I send down, which I picked off the solid rock, indiscriminately, at the bottom, proves this fact. I mention this truth, only in justice to the district; and because the stock being a marketable article, the public at large have a right to know the truth. My opinion is that those who buy this stock at \$40, buy very cheaply indeed and lay the foundation of a nice speculation.

These claims I have spoken of however, including only a portion of the Union are but a tithe of those in the district. They simply embrace those located on the right of the town, leading to the river. I am just going out again in the opposite direction with Mr. Lyons a gentleman from Mr. Honingsberger's establishment, and shall continue my reports until I have inspected all.

L. H.

Copperopolis, Oct. 15, 1863.

[From our Special Correspondent.]

#### COPPEROPOLIS.

MR. EDITOR.—My first letter upon the mines of this district embraced those of what I shall call, or the sake of distinguishing them, and making their exact locality more readily understood, the first division—that is, those stretching from the town on the right-hand to the river Stanislaus, and supposed to be on the celebrated Copperopolis lode proper.

Since that letter, I have received a continuance of civilities from the residents of this hospitable town, being in fact kept traveling round nearly all the time. Your old friend, Mr. S. Johnson, invited me to spend a few days at his place, to inspect the Eureka and Elizabeth Consolidated, the Argentine, and the Hope, all being under his superintendence. I cannot speak to highly of his polite attentions. On my return, I paid a flying visit to the Napoleon, where I was cordially entertained by the new Superintendent, Mr. Steinberger, who allowed me the use of his horse for a couple of days, so that I could be more unfettered in my movements. I was in the saddle to-day from eight A. M. to six P. M., and though somewhat fatigued—for I assure you, it is not very agreeable work, going down all these mines, sometimes by ladder, sometimes by rope, to a depth ranging from 50 to 200 feet—I, nevertheless, remember it is the night on which I must send you another communication.

The peculiar features of this region, as you approach it from the plains, have so recently been elaborately described by the Editor of the Press, it will be unnecessary for me to say anything more on that head, than that his account was geologically accurate, and that the entire belt, commencing at the Napoleon, and extending to San Domingo, a distance of 25 miles north, affords a most complete field for scientific investigation. The fact to me most incomprehensible is that this discovery should have been delayed so long, considering the number of men in this State, who have worked in the English and American copper lodes. In every rock and stone, in the gulches or on the banks, you can observe the copper hue, while in the croppings you will everywhere find carbonate of copper, frequently sulphurets, and sometimes native ore. Perhaps, however, it is most wisely ordained, that things are as we find them; that one discovery should follow another in due season, to stimulate the enterprise, and employ the energies of the people. A few years ago it was all gold, now it is all silver and copper; a few years hence, it will be all iron, lead and tin; and, when our necessities force us into further activity, we shall search for the latter metals in this vicinity, and find them in equal abundance.

But I must now give the result of my last week's inspection. The first on my list is the

#### MASSACHUSETTS.

You may remember I told you this was the first I visited. Its description I delayed because it did not belong to the range or location of those I gave, and because I was convinced on seeing it, that another discovery, as important as the Union was made, and I naturally desired to see the results of a little more work, before I spoke definitely of its merits. This mine is situated some six miles south of the town, on a range running parallel with those mentioned already, bearing from them on an air line with the Saxon and Table Mountain, about three miles west. This lode, distinct from the other, has somewhat peculiar croppings and bears a very straight course to the river. It contains 4,500 feet divided into 150 shares. There is only one shaft, (prospecting) down about 40 feet. The rock from the commencement has been very pure, and now yields ore sufficiently good for shipping. When twenty feet deeper, I think the vein will be twenty feet wide; while for richness, when fully developed, it will equal, if not surpass, the far-famed Union and Keystone. Adjoining on the North of the Massachusetts comes the

#### PACIFIC.

From Copperopolis, the Pacific is the first mine on this range. I mention it second because at present it has not the same importance as its neighbor. There is no reason, however, why it should not be as good. It contains, I believe, 4,500 feet divided into 30 shares. It will henceforth, I understand, be worked steadily. On the south end of the Massachusetts, going towards the river comes the

#### SWANSEA.

This mine once reached so high as to have a local value of \$15 per foot. Its valuation has fallen at present, but simply, in my opinion, from want of judgement or experience in

selecting the place to put the shaft down. For instance this mine, unquestionably valuable, has been worked for a year with no practical results as regards the vein, from this cause alone. The old shaft 70 feet deep is at last abandoned and a new one commenced under much more favorable auspices. I think the present shaft will develop something, though the site is not exactly well chosen. It contains 4,500 feet divided into thirty shares. The work will now be prosecuted vigorously. Next to the Swansea, and last on this range comes the

#### SCORPION.

This mine is nearest to the river of any, being almost on its banks. The same error of judgement has been committed here as at the Swansea, and their shaft, except for ventilating purposes in future, is entirely useless. They have gone down 120 feet, and intend sinking for two weeks more, although a long way below the vein, with an intention of drifting to the east to strike it. In my opinion, this is bad policy. They will have to run a drift at least 40 feet, and through so hard a rock that it will cost as much nearly as to sink a new shaft in the proper place. The rock hitherto raised carries an immense quantity of iron, and is generally corrupt. There is no doubt, however, the claim will ultimately be good. It contains 3,500 feet divided into forty shares. This claim is the wettest I have been into yet; water is generally very scarce throughout the district. From the river, on the opposite side to Montezuma, a distance of six miles south, this wondrous copper lead disappears altogether.

I must now take you in an opposite direction, to Mr. Johnson's. You leave town on the Sonora road, and go round some seven miles to get to his place, though really only four miles from town. I enjoyed myself much with him, for he's a splendid fellow. We had long political chats; he is a Union man of the first order. The principal claim is the

#### EUREKA & ELIZABETH CONSOLIDATED.

This claim contains 6,000 feet and is incorporated. The main shaft is down about sixty feet, with good indications.

When I was there they had a tremendous boulder on the bottom, but below that, as is often the case, they will find, I think, a very favorable change. On the same range comes the

#### ARGENTUM.

In this claim there are 3,000 feet, not incorporated, and I believe, principally owned by San Francisco men. The work has been suspended for some time, although the oldest claim on this range, to complete certain preparations, and will soon be renewed. Next and last follows the

#### HOPE.

There are 4,500 feet in this claim, not incorporated. The shaft is 35 feet deep through a very hard rock, but of a good character. Water is now appearing which indicates a change. All these mines are strongly developed. They lie in a direct line four miles north-east of Copperopolis, and the water of the entire district falls into the Calaveras River, not the Stanislaus. In the croppings, native ore is found. The mail is closing, and I must close. I desire, however, to say more of this range.

I find the Mining & Scientific Press, is appreciated here and subscribers are coming in. Tomorrow is the Judiciary Election, so I suppose I will get a day's rest.

L. H.  
Copperopolis, Oct. 20, 1863.

PACIFIC QUARTZ MINING COMPANY, GRASS VALLEY.—Grass Valley, Nevada county, has long been famous among California mining districts for her rich mines of gold, both in placer and quartz. The Allison Ranch mine is famous throughout the world over, and is generally set down as the richest gold mine ever worked. The Messrs. Watt & Co., on Massachusetts Hill, are working a mine which is probably not at all inferior in value to the Allison Ranch, and only about a mile and half distant. During the past two years a company known as the "Pacific Quartz Mining Co.," have been opening mine, almost directly in the town of Grass Valley, which to all present appearances, bids fair to rank fully equal in extent and yield with either of the two first mentioned. This mine has been opened to the depth of 300 feet below the bed of Deer Creek, which it crosses, and at a depth of 240 feet, gallery has been opened a distance of about 250 feet, the rock from which has proved of a richer average than that taken from any lesser depth. This gallery has thoroughly proved the value of the mine. About 2,000 tons of rock has been taken from below the water level of this mine, which has av



aged fully \$45 the ton, constantly improving, with its depth. The hoisting and pumping apparatus has hitherto been driven by a twenty-five horse power engine, which however, is now to be superseded with one of larger capacity. The stock of this Company is divided into 60 shares, none of which to our knowledge has ever changed hands. In addition to the three already mentioned Grass Valley possesses several others which are bid fair to reach the standard of first class mines. The Pacific Coast a pocket of special interest a few miles since, near the northern extremity of their lower gallery from which they took about \$10,000.

## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twenty years, has been set down as a failure. The Ordinary Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

### METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron, and consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamp, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1860, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps,

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed being cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley, San Marcial Co., Mexico, John D. Winters & Co., Esmeralda, Crown Point Co., Gold Hill, Potosi Mining Co., Virginia City, Tajo Mining Co., Mexico, Sheba Mining Co., Humboldt, Lotta Mills Co., Coso, American & Mexican Co., Mexico, San Carlos Mining Co., Owen's River, Union Quartz Co., Aurora, Triunfo Mining Co., Mexico, Napa Quartz Co., Aurora, Petaluma Quartz Co., Gold Hill, Francis Mellus & Co., Slate Range, W. R. Churchill & Co., Mexico, Willow Springs Co., Coso, Hews, Howe & Co., Rich Gulch Flat, F. A. Benjamin & Co., Mexico, O. J. Parker & Co., Nicaragua, Gibbons & Clayton, Esmeralda, Smith & Clouser, S. F. Reduction Works, Amagoza Mining Co., San Bernardino,

## MANUFACTURED ONLY BY GODDARD & CO.,

At the Pacific Iron Works.

SAN FRANCISCO.

on 125 to 136 First street, and 126 to 144

Fremont street.

I. C. E. KLEPZIG & CO.,  
GUN MAKERS,  
...AND...  
DEALERS IN GUN MATERIALS,  
733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Eckland. Je21

WANTED,  
GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,  
By FRONTIER A. DEVIERCY,  
437 Pine street, San Francisco.



Oregon street, between Washington and Davis and Front and Jackson streets, SAN FRANCISCO.

Manufacturers of Fire Proof Doors and Shutters, Bank Vaults, Grating, Cemetery Railings. All orders from the interior Oregon, Washington Territory, Vancouver's Island, British Columbia, or any place on the Pacific coast, attended to with promptness and dispatch.

Mr. Sims appreciates the Past liberal patronage of his friends, and trusts that he may continue to merit it in the future.

For the information of Strangers he would say that he feels confident that his experience in his particular calling is surpassed by none on this coast, which his superior work, sent to almost every town in this state, Oregon, also Victoria and the Sandwich Islands, and to be seen on some of the best buildings in San Francisco, fully attests. A large assortment of second hand shutters for sale at low rates. api3

LEANDER RANSOM,  
Civil Engineer  
AND  
SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO  
STATE LOCATING AGENT.

And as such having the sale of  
600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.  
Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE, 828 Montgomery streets. oc7-3

D. NORCROSS,  
Masonic Temple, No. 6, Post Street.  
Military Goods of all Descriptions.  
Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.  
aug 17

FOR SALE.  
PATENT PRESSED RUSSIA IRON MINING PANS.  
Russia Iron Quartz Screens for Mills;  
Portable Pans; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the  
UNEQUALLED  
MONITOR COOKING STOVE  
Or RANGE,  
FOR HOTELS.  
To which we call particular attention.  
je-29 TAY, BROOKS & BACKUS.

G. E. MOORE,  
Assayer and Analytical Chemist,  
No. 612 Sacramento Street,  
HAVING ESTABLISHED A CHEMICAL LABORATORY,  
furnished with every requisite for delicate Analytical work, is prepared to execute the Assay and Analysis of Ores, Mineral Waters, Guanos, etc., with accuracy and dispatch.

REFERENCED:  
Prof. J. D. Whitney, State Geologist, San Francisco.  
Albion & Co., San Francisco.  
Sather & Church, San Francisco.  
John Porritt, San Francisco.  
D. O. M. Sacramento. sep14

## PEOPLE'S OPPOSITION Steamship Line!

Special Notice.—The Line have been withdrawn from the Nicaragua Route until further notice.

### GREAT REDUCTION IN RATES!!!

The Fast and Favorite Double End Steamship,  
MOSES TAYLOR,  
J. H. BLETHEN.....COMMANDER  
Will be dispatched for PANAMA  
From Mission street Wharf.  
SATURDAY, - - - - OCTOBER 3, 1863  
Punctually at 9 o'clock, A. M., on  
Connecting at Aspinwall, by the Panama Railroad, with the Splendid Steamship  
ILLINOIS - - - - - 2500 Tons.

The Moses Taylor, since her last trip has undergone the most extensive repairs. Her deck have been extended forward and aft; cabins enlarged, refitted and repainted throughout—making her accommodations equal to any Steamer on the ocean.

For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco.  
Opposite the Post Office.

BOOK KEEPING,  
Penmanship  
AND  
COMMERCIAL CALCULATIONS,  
Taught by J. S. LUTY  
PRACTICAL ACCOUNTANT,  
305 Montgomery Street, Corner of Pine.  
TO QUARTZ MINERS.

All persons interested in Mining Machinery are invited to call at Donahue's Foundry and examine my improved Amalgamator. It is unquestionably superior to anything now known for amalgamating Silver and Gold. It works 1000 pounds of ore at a time, and will amalgamate over three tons a day. By the motion of the revolving muller, the pulp is drawn through its centre and passes under it, between the grinding surfaces, to the circumference; from whence it passes again over the muller to the centre, through the holes and between the grinding surface to the circumference as before. Thus a constant circle on the face of the pulp is kept up, bringing the particles of ore again and again under the muller, and reducing the whole mass to an impalpable powder.

No quicksilver lies between the surfaces to be ground, but at the circumference and centre of the pan where the metal must pass through it as the pulp circulates. A patent was granted for this Amalgamator in December last, and all persons are again warned against purchasing machines made at Donahue's Foundry called "Wheeler's Amalgamator," as they are an infringement on my patent, and a suit is now pending in the U. S. Circuit Court against the parties infringing. My Amalgamators can be seen running at Donahue's Foundry, where all can judge of their operation and the very superior style in which they are being manufactured.  
sep21 THOMAS VARNEY.

PATRONIZE  
HOME MANUFACTURIES!!!  
James Longshore,  
Trunk and Valise Manufacturer,  
307 Sansome Street, under Tehama House. Trunks and Valises, Wholesale and Retail, Fine Sole Leather Trunks, Valises, and a fine assortment of LADIES' TRUNKS constantly on hand. Trunks covered and repaired.  
aug x

Giffards Injectors,  
FOR SUPPLYING BOILERS WITH FEED WATER  
without Pumps. No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.  
DAVID STODDART, Agent,  
je22 Cor. Pine and Front Sts., San Francisco.

APARTMENTS.  
FURNISHED APARTMENTS, WITH, OR WITHOUT Board, at 1018 Powell Street, between Clay and Washington street. Persons desirous of a respectable home will do well to apply.  
je28

## ARCHITECT,

Cor. Montgomery and Bush Streets,

Over the Mercantile Library Rooms,  
San Francisco

## ASSAYS!

Promptness and Accuracy Secured  
BY THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs and Mining Companies.

J. H. CHURCHILL, M. A.,  
(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and Washington Streets, San Francisco. jly6

RIEHN, HEMME & CO.,

## ASSAYERS.

Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.

Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO

Messrs. F. PARROT & CO., Messrs. ALSOP & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.

CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in Assaying, also in Mineralogy and Chemistry as far as required to become a practical Assayer.

EXCELSIOR IRON WORKS,  
712 Sansome street,  
Between Jackson and Pacific, San Francisco.

GALLAGHER & KENNEY,

Manufacturers of all kinds of

Architectural and Ornamental Iron Work,  
Bark and Stone Vanils, Safes, Doors, Shutters, Balcony, Area and Cemetery Railings, Gates, Stairs, Etc., and all kinds of Blacksmithing and Jobbing done with promptness, and at Reasonable Prices.  
Orders from the country promptly attended to.  
je13

## New Style of Ladies' Buckle!

W. BOHM,

INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PATENT from Washington for an improvement in the construction of Ladies' Buckles, is now ready to furnish the same in every variety of style. This buckle possesses several very important improvements over any other in use.

The invention having been carefully examined at the Patent Office, has been adjudged to be a useful improvement, and Letters Patent have been granted for 17 years. It excels all other buckles in

### Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine this Buckle at the Jewelry Establishment of  
BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 1 Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm," will be guaranteed as to its Strength and Durability.  
je 27 W. BOHM, Patentee.



## THE OWEN'S RIVER REGION AND CANAL COMPANY.

It gives us pleasure to notice the vigor which the Owen's River Canal Co. display in the prosecution of their enterprise. Although the Company was only incorporated on the 26th. of last August, a large amount of the stock has been taken, and tools, provisions and camp equipage for thirty men, have been forwarded, via. Aurora, through which place, they passed some ten days since.

We have examined, at the office of the Company, in this city, the maps and surveys of the Country including the map as made by J. E. Clayton, of the line of the Canal, and showing many of the prominent lodes of the Russ and Inyo Districts.

From the best information we can obtain of the character of the mines and the many advantages they possess in the way of cheap facilities for working, possessed, as they soon will be, through this Canal Company, of an unlimited supply of water power at a mere nominal rate, this must soon become an important mining district.

As the Company proposes to charge only one dollar per stamp, running time, for motive power, it will be readily seen and understood that lodes paying not over \$20 per ton will be worked at a profit, or in other words, ores from all the mines can be worked to as low a grade as \$20 per ton. There are also other advantages which this country possesses over Reese River, Humboldt, Washoe, and Esmeralda, in the large amount of agricultural land in the valley of Owen's River, immediately adjoining the mines, and in the superior mildness of the climate, this region being neither so far south as to be burnt and scorched with heat, nor so far north, or so much elevated as to have snow to fall and lie over twelve hours after falling. Cattle remain in good condition, all the year round in the open fields; and the Winter is the most favorable season for work, and freights are taken at lower rates in the Winter by the way of Los Angeles, than at any other time of the year. Freights can also be taken at all seasons, from Visalia, at the same rates.

There is now a steady stream of immigration pouring into the valley, from all quarters. On Thursday of this week, a company of thirty farmers, mechanics and miners, connected with some large capitalists, of this city, leave Brooklyn or San Antonio, across the bay, for Owen's Valley. We have also heard of several smaller parties recently going forward.

De Bend City and San Carlos, the principal settlements in the valley, are being rapidly built up with stone and adobe houses of the most substantial character, while all the indications for permanency, show that this country is steadily progressing.

The people of that district have never as yet attempted to raise an excitement by newspaper articles, yet it's fame, and name is being spread abroad, and we look for quite an excitement and rush to Owen's River at an early day.

The Owen's River Canal Enterprise is one of the highest importance to that region, both as regards its mineral and agricultural development. To the miner it affords cheap and convenient power, and to the agriculturalist abundant facilities for irrigation where needed. By its cheap power, many mines which could never pay the expenses of steam, may be wrought with profit, and thus give employment to thousands of miners, which would not otherwise be brought into that region, to be fed by the farmers of the valley.

A small outlay only will be required to put the work in a sufficient state of forwardness, to get their sawmill in operation, the income from which ought to be nearly if not quite sufficient to construct the balance of the work within a reasonable length of time. As an investment, few schemes present a more favorable basis and the terms upon which its stock is offered are liberal in the extreme, as will be seen from the Company's advertisement in another column. We feel free to speak of this enterprise as we do from our favorable personal knowledge of its projectors, from the information within the reach of any one with regard to the feasible nature of the scheme, and from the fact that the undertaking is one of public interest, as an important initiatory step in the development of a large and valuable region of country, upon the extreme Eastern border of our State.

About two millions of treasure were received at San Francisco, from the interior, during the ten days preceeding the sailing of the last steamer.

## IMPORTANT DISCOVERY.

The discovery of a remarkable *Salt Spring* to the north of Virginia City was announced a short time since. More value should be attached to this discovery than it has generally obtained. Salt, apart from its domestic use, is an indispensable requisite to the reduction of the silver ores of the Eastern slope. At first the article was transported to Virginia City in large quantities from this city. Some two years since a large deposit of mineral salt was discovered in the Walker's River region, from which point the reduction works of Washoe have since been chiefly supplied. This deposit, however, is at a great distance from the chief point of consumption—some 180 miles—and for the most part over a very rough and heavy road. At a more recent date we have all heard of the wonderful salt deposit between Humboldt and Reese River. This latter discovery, however, is more remote from Virginia City than that of Walker's River.

The latest discovery, however, and the one to which we designed, more particularly to refer, at this time, is located about sixty miles north of Virginia City and some twelve miles east of the California State line, which latter fact induced the proprietors to name the location the Boundary Line Salt Works. This discovery consists of three springs within the circuit of a few feet, the waters from which may be easily connected. The main spring alone yields a regular flow of about ten or twelve inches, miner's measure. The salt held in solution by the water is equal to a fraction over one half its bulk and yields a salt chemically pure—a very important consideration, whether used for ore reduction or culinary purposes.

The chief value of this discovery consists in the facility with which it may be delivered in Virginia City and neighborhood, the point of chief consumption of the article on the Eastern slope. The springs are located near the Eastern foot of the Sierra Nevada range, and a fine natural road upon a level alkaline basin may be found nearly the whole distance from the springs to the Truckee Meadows, from which point Virginia City is reached over the Truckee Turnpike.

The proprietors contemplate the early erection of evaporation vats, when they will be able to lay down a superior article of salt in Virginia City at about half the present price of the article in that market, and still leave a large margin of profit.

LINE HOUSE MINING DISTRICT, }  
NEVADA CO., OCT. 18, 1863. }

MR. EDITOR:—I ask a place in your valuable paper for a few notes taken during my ramblings through this and adjoining mining districts. I find that the excitement of three months ago has somewhat abated, and that the owners of copper claims, (none others are thought of here,) have ceased running after new claims, and have turned their attention more to developing those already located; still there are a large number of claims that have been located but never yet prospected and now liable to forfeiture, whilst others have only done work enough to secure them. One hundred dollars expended upon a claim will hold it for two years.

Among the claims now being worked, I will mention a few. The Hooker is being worked with good prospects at the depth of about 90 feet. Stock in this Company is sought after by those best acquainted with the claim. "No Chance at All" is being worked with fair prospects; also the Mammoth which bids fair to prove valuable. The Last Chance is still at work with an improvement in the appearance of the Ore. They have sacked some but I believe have not yet shipped any. The Eureka Consolidated Company, on Green Lead, is at present taking out very good ore. The vein is increasing in thickness; they have a number of tons of first quality ore already sacked, and I understand intend to commence sending it off to-morrow, and will continue sacking and shipping as fast as ores are taken from the mines. The Still House Lead, on Bear River, is reported good. I have not yet seen it. The Well Claim is still being worked with very flattering prospects. After sinking a shaft over 50 feet, (49 feet of which was through solid ore, following the east or hanging wall,) they have run a drift or tunnel westward, with the intention of finding the west wall and thus ascertaining the width of the vein or ledge. This drift has been pushed through a mass of mineral for sixty feet, without yet striking the west wall, thus proving that the vein is at least 60 feet wide, with prospects of a still greater

width. The Company have already shipped about 180 tons of ore, and have a plenty left. They are now taking out and sending off ore as fast as teams can be had to haul it to Lincoln, from which place it is forwarded by rail-road. From outward appearance the Company are well prepared for a Winter's work, having a good whim by which they can haul all the ore and water out of the mines, with one horse, with ease, and the works are all covered with a good, substantial house to protect them from the rains.

There are a number of other claims in the vicinity on which work is being done—some with very good prospects but I must defer further notice of them for some future time.

PROSPECTOR.

THE PALMO SILVER MINING COMPANY filed their certificate of incorporation on the 17th. inst. The first Board of Trustees are Edward Tomkins, D. S. Lord, Wm. Faulkner, L. P. Fisher and Joseph Van Doren. Capital Stock, \$240,000 in 2,400 shares. It is located in the municipality of Ryan, Ures District, Sonora, Mexico. This mine of silver petanque metal has the reputation of being one of the richest mines in the State of Sonora. It is in the Sierras de la Palma, near the Aroye de la Palma, where there is a fine water privilege and Hacienda, with twelve arrastas belonging to the mine; also an abundance of wood and pasturage land.

The mine was once worked by the Montezumas and afterwards by the old Jesuits, whose history of the mine, as is seen in their manuscripts or Church records, states that the metal pays 100 marcos per bulto, or 800 ounces of silver to the 900 pounds of ore when worked in the common arrastra or patio process, with the simple use of quicksilver and salt. The mine has always been worked in the primitive style of going to the top of the hills, and sinking, and packing out the ore on the backs of the Peons and leaving Pillars which consists of three fourths of the whole mine. The lower Pillars are in good working order yet, all in metal. The present Company have started a tunnel which will strike the vein below the old works, where they will undoubtedly find the class of metal last obtained from the mine, some thirty years ago, and known as blue petanque or cobre gruisa, the richest class of silver ores.

Nevada and California Processes of Silver and Gold Extraction, by Guido Kustel—Carlton, San Francisco.

It is with considerable satisfaction that we find in this book so much to which we can do inadequate justice this week. The material is treated by a writer who has taken to the mine and the mill a spirit of enquiry which was not to be satisfied without a reply. The result is valuable data for judging of the economy attained, and many suggestions for guidance in carrying on the work of improvement.

The facts in this book will be very valuable to the development of the resources of California. There is one point of importance which is deserving of the earnest attention of trustees of mining companies and mine superintendents. Mr. Kustel writes: "In Germany the roaster works with hands and head, and is responsible for the result. His work can be trusted. Our roasters are inexperienced, frequently, green hands, without the least interest in the result." It may be on this account that he depreciates "precipitation" which has been there so eminently successful. There "common workmen," says a recent writer, "have attained the facility in performing it." The problem is to give them such an interest in the success of the particular operation intrusted to each individual as will ensure persevering application—every step must be checked, then wanton waste, from carelessness, will be prevented.

POLL TAX.—Poll tax it is said must be paid in coin. Greenbacks are not taken by the collectors. The Ophir company at the works in Virginia City, says the *Enterprise*, tendered the amount of poll tax due from their employees to the Collector in greenbacks, and he refused to receive them. The matter will be fully tested. The Tax Collector was about to sue the Ophir Company for each and every receipt. It is said that the refusal of the Collector to receive greenbacks is founded on decisions given in this Territory, in California and some of the Eastern States.

PEN POINTS are now manufactured out of the new metal Aluminium. This metal preferred above any other from the fact that it is not oxydizable.



## THE MINING SHARE MARKET.

The Mining share market, during the past week has been quite active, and notwithstanding the adjournment of the stock Board on Wednesday, a large amount of business has been transacted. The recent disposition on the part of the brokers to call in and curtail their loans on mining securities has had a somewhat depreciating tendency on some of the trading shares, while several speculative stocks have manifested unusual activity and in some instances, an important improvement.

Ophir shares during the past two weeks, have been unusually active, at materially reduced rates. This depreciation is attributable, mainly to an inclination on the part of many first class holders, to let go their shares with the view of other investments. This disposition arises from the anxiety felt with regard to the suit with the Burning Moscow, which is soon to have a hearing.

Gould & Curry sales have been light and fluctuating. The weakness in these shares is attributable to the anticipation of decrease in the next dividend which has been sold, the last week, for \$140 per foot. If the October dividend is lighter than its immediate predecessors, the fact will be owing to extraordinary expenses, for the receipts from the mine this month will be larger than for any previous month since it was opened.

Burning Moscow has been the chief speculative stock of the past two weeks. Although 1300 shares changed hands during the previous week, this stock has continued in undiminished favor during the past week, with sales reaching 919 shares.

Yellow Jacket has advanced \$150 in consequence of a favorable issue of its suite with the Union. Considerable importance is attached to this decision, inasmuch as it is supposed that it will affect, to a greater or less extent several other important suits now pending.

Union, Gold Hill, which has been in considerable demand several weeks, at from \$50 @ 75, suddenly collapsed, the last week, in consequence of losing its suit with the Yellow Jacket and is now quoted at from \$5 @ \$7½.

Uncle Sam, Gold Hill, appears to be coming into high favor. It has suddenly advanced from \$135 @ \$225. Advices from the mine are highly favorable as to the future of this mine.

Sheba shares which have been very quiet of late, has manifested a sudden activity. Opening the week at \$70 they suddenly advanced, near the close, to \$160, but finally declined to \$227½. A few months since these shares were in quest in this market at \$120 to \$500, but for a long time, until within a few days, have been dull at \$75 @ \$100. It has been recently reported that they are now taking out from the mine better ore than ever before, and that the vein is increasing in width. Notwithstanding the "bore metal," which so abounds in the Sheba, and which fact has been met with telling effect by the "bears." We feel warranted in the belief that the Sheba will yet prove a very rich mine. De Soto has advanced to \$40.

Baltic, Gold Hill, has fluctuated from 47½ @ 62, closing \$57.

El Dorado is dull at \$70.

Wide West continues to droop, and is heavy at \$82½, cent assessment of \$25 included.

Utah is a little better, and has sold at \$62.

Real Del Monte sold a few days since at \$470, but is now scarcely so firm. Large amounts of Bullion have been received in this city recently, from this mine.

Rio Grande River Stocks are attracting attention, but so little yet is known of the real value of the numerous claims offered in the market, that operators are somewhat timid in their purchases.

The Florida is held at \$50, 35 bid. Union No. 2 is offered at \$60. Diamond, said to be a promising claim, is offered at \$20. For James River \$13 is bid. Oregon is quoted at \$10 bid, \$45 asked. Flora is enquired for at \$15. 5 is offered for Ontario and \$50 asked. Willow Consolidation is held at \$25. Madison at \$12. Lightner at \$12. Golden Era at \$15. Austria at \$12. Marshall is said to be in much favor, with enquiries at \$40. Mills, Post and White and Erie are enquired for, the former at \$30, the latter at \$25.

## REPORT OF BIDS

At the San Francisco Mining Stock Board.

For the week ending Oct. 17, 1863.

Names of Companies.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Latest Asking Price.
<b>WASHOE STOCKS.</b>									
Ophir	12	\$300	17.30	17.50	---	17.50	17.00	16.50	18.00
Gould & Curry	4	500	43.00	43.00	---	40.00	44.00	44.00	46.00
Savage	1	200	---	---	---	---	---	---	---
Chollar	4	300	8.00	7.00	---	8.00	---	---	10.50
Potosi	12	500	1.50	---	---	---	12.50	---	20.00
Hale & Norcross	2	500	---	---	---	---	---	---	19.00
Sierra Nevada	1	500	98	95	---	95½	92½	90	90
Burns	4	500	10	---	---	90	10	110	110
Burning Moscow	12	100	312½	300	---	305	280	150	270
North Potosi	1	300	40	37½	---	35	35	30	---
Merced	1	125	---	---	---	---	---	---	---
Charles Caney	1	30	11	12	---	---	---	11	17
Sacramento	1	500	---	---	---	---	30	50	---
Low	1	---	---	---	---	40	---	60	---
El Dorado	1	65	---	---	65	60	60	70	---
Barnside	1	---	8½	4	---	6	8½	7	---
Adriatic	---	---	---	---	---	---	---	---	---
Brennus	---	---	---	---	---	---	---	---	---
Prize of the West	---	---	---	---	---	20	20	60	---
G. H. Quartz M. Co.	---	---	---	---	---	---	---	---	---
Imperial	1	100	1½	1½	---	2½	3	2½	440
Cedar Hill Tunnel	1	200	3½	3½	---	3½	3½	3½	---
Mount Davidson	12	300	---	---	---	---	---	---	---
Central	12	300	---	---	---	---	---	---	---
California	12	300	---	---	---	---	---	---	---
Rogers, F. D.	1	250	---	---	---	---	---	---	---
Lucerne	1	100	---	---	---	---	---	---	---
Lady Bryan	1	500	---	---	---	---	---	---	---
La Crosse	---	---	---	---	---	---	---	---	---
Moore	---	---	---	---	---	---	---	---	---
Porter	---	---	---	---	---	---	---	---	---
Crown Point	---	---	---	1000	---	10.5	9.5	8.5	875
Manhattan	---	---	---	---	---	3½	---	---	---
Hudson	---	---	---	---	---	---	---	---	---
Lady Ellen	---	---	---	---	---	---	---	---	---
Schiller	---	---	---	10	---	---	---	---	---
Seneca	---	---	---	---	---	---	---	---	---
Vindicator	---	---	---	---	---	---	---	---	---
<b>EMERALDA STOCKS.</b>									
Wide West	1	600	75	7½	---	80½	75	82½	85
Antelope	1	500	---	---	---	---	150	---	---
Emeralda	1	1000	---	---	---	---	---	---	---
Real Del Monte	1	400	440	---	---	---	---	---	---
Utah	1	250	5	60	---	65	60	65	60
Silver Hill	1	500	28	21	---	22	21	---	34
Nevada	1	250	12½	---	---	---	---	---	---
Federal Hope	1	---	---	---	---	---	---	---	---
South Utah	---	---	---	---	---	---	---	---	---
Jenny Lind	---	---	---	---	---	---	---	---	---
Falls of Clyde	---	---	3	4	---	---	---	---	---
Sunbeam, S. W. ex.	---	---	---	---	---	---	---	---	---
Bamboo	---	500	---	---	---	---	---	---	50
Great Western Tun.	---	---	---	---	---	---	---	---	---
Burlington	---	---	---	---	---	---	---	---	40
El Paso	---	---	---	---	---	---	---	45	---
Crockett	---	---	15	---	---	---	25	---	60
Etna	1	100	---	---	---	---	---	---	---
<b>COSO STOCKS.</b>									
Josephine	2	250	9	---	---	9	5	---	---
Willow Springs	1	100	---	---	---	---	---	5	---
Empire	---	---	---	---	---	---	---	---	---
Coso	---	600	---	---	---	---	---	---	---
<b>MEXICAN MINES.</b>									
Mina Prieta	---	1000	---	---	---	---	---	---	---
Dios Padre	---	---	---	---	---	---	---	---	---
<b>COPPER STOCKS.</b>									
Napoleon	1	600	---	60	---	---	---	4½	150
Josephine	---	---	4½	4½	---	---	---	---	10
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	---	---	4	---	---	6	---	3½	5
Rhodes Diggins	---	---	---	---	---	---	---	---	---
Eureka	---	---	---	---	---	45	45	60	---
Fellowes	---	---	---	---	---	---	---	---	---
Rock River	---	---	---	---	---	---	---	---	---
Hecla	---	---	---	---	---	---	---	---	---
<b>FLUORIDE STOCKS.</b>									
De Soto	---	---	15	15	---	---	23	38	40
Great Basin	---	---	---	---	---	---	---	---	---

## SALES FOR THE WEEK ENDING OCT. 24, 1863.

Ophir	516 Shares	\$1700 @ \$1800	per foot
Falls of Clyde	20	4	" "
Great Western Tun.	---	---	" "
Josephine	---	---	" "
Coso	---	---	" "
Gould & Curry	48	4300 @ 4600	" "
Savage	---	---	" "
Chollar	6	940	" "
Laurel Hill	5	6	" "
Willow Springs	---	---	" "
Branch Mint	---	---	" "
Die Vernon	20	11	" "
United Cosmopol.	---	---	" "
Union, G. H.	141	7½ @ 75	" "
Union, R. D.	2529	2 80 @ 5	" "
Rhodes Diggins	---	---	" "
Hale & Norcross	---	---	" "
Uncle Sam	111	160 @ 250	" "
Echo	---	---	" "
Baltic	265	47½ @ 67½	" "
El Dorado	15	70 @ 75	" "
North Potosi	5	40	" "
Caledonia Tun. Co.	65	39 @ 43	" "
Potosi	40	1500	" "
Yellow Jacket	15	960 @ 1150	" "
Imperial	---	---	" "
Silver Hill	20	28 @ 30	" "
Bodie Bluff	173	3 @ 3 75	" "
Willow Springs	5	5	" "
Sheba	205	70 @ 160	" "
De Soto	25	35 @ 40	" "
Monte Christo	---	---	" "

Overman	---	---	" "
Best & Belcher	---	---	" "
Sierra Nevada	86	90 @ 96	" "
Daney	---	---	" "
Burning Moscow	919	250 @ 340	" "
Charles Caney	---	---	" "
Baltimore American	12	40 @ 45	" "
North American	391	60½ @ 72½	" "
Bullion (G. H.)	---	---	" "
Pride of the West	---	---	" "
Spanish No 2	---	---	" "
Norton	130	6 @ 7½	" "
Barnside	10	9	" "
Adriatic	---	---	" "
Iowa	---	---	" "
Madison	143	20 @ 30	" "
Buckeye	---	---	" "
Lucerne	---	---	" "
Lady Bryan	---	---	" "
Mt. Davidson	173	3½ @ 3¾	" "
Cedar Hill Tunnel	390	2½ @ 3	" "
North Ophir	---	---	" "
Wide West	15	80 @ 87½	" "
Real Del Monte	---	---	" "
Utah	15	61 @ 65	" "
Pond	---	---	" "
Grass Valley	---	---	" "
Michigan, G. H.	10	50	" "
Urul	---	---	" "
Bodie No 2	---	---	" "
Blue Ledge	10	7½	" "
Napoleon, Copper	---	---	" "
Oncida	---	---	" "
St. George	---	---	" "
Sacramento	---	---	" "
Governor Nye	25	4	" "
Table Mountain Cop.	---	---	" "
Diamond, R. R.	---	---	" "
Josephine, Copper	---	---	" "
Melones	6	90	" "
La Crosse	---	---	" "
Harrison, Vir. Dis.	---	---	" "



je4 A. B. FORBES, Agent.  
Corner of Sacramento and Leidesdorff sts.



FOUNDRIES & MACHINE SHOPS.

**REYNOLDS'**  
Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

127 of these Invaluable Machines,  
ARE NOW IN USE  
In California and Nevada Territory, giving a perfectly  
regular motion and  
Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor**

Is the CHEAPEST, SIMPLEST and QUICKEST to set  
and least liable to get out of order of any Governor in  
use. It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.

**Clark's Steam and Fire Regulator,**

For controlling the Draft or Blast by opening the Clum-  
ney or Valve in the Blast Pipe by the pressure of the  
steam in the boiler. It will regulate the pressure to a  
pound, on the square inch. It CANNOT get out of order  
and any person can put one up in an hour after the dam-  
per is put in.

**Ingersoll's Patent Drill Press,**

With which drilling can be done the same as with the  
common ratchet, and when small holes are wanted, it  
can be done four times as fast. The handle can be work-  
ed in any direction.

**Felt for Steam Boilers, Pipes, Etc.,**

At the lowest market rates.

**Steam Engines, Boilers, Pipes,**

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.

**Anti Incrustation Powder,**

A Sure Remedy for Scale in Steam Boilers, without injury  
to the iron. In use for the past 25 years.

Refer to—Sugar Refinery, San Francisco,  
Cuttell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.  
**E. T. STEEN AGENT.**  
No. 33 Fremont Street, San Francisco.

**MOYNIHAN & AITKEN,**

**Boiler Makers and Blacksmiths,**

Mission, between Beal & Fremont Sts,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work exe-  
cuted at the shortest notice, and on the most reasonable  
terms. Jy 29

**PUMPS!**

**HARRISON'S**  
California Lift and Force Pump,

WITHOUT VALVES OR PACKING,  
Suitable for Mines, Fire Engines, Wrecking or Irrigat-  
ing. This is the Cheapest, Lightest and most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

**ALL SIZES;**

Capable of throwing from ONE HUNDRED to FIVE  
THOUSAND Gallons per Minute.—For sale by

**C. H. HARRISON,**

PHOENIX OIL WORKS,

Je-15 517 Front Street, San Francisco.

**50 lbs. MARINE and**

**Fire-Proof Paint,**

MANUFACTURED BY THE PACIFIC METALLURGICAL  
Works in this city, for Hulls and Decks of Vessels  
from ground Mineral Rock contains Arsenic, Copper, Li-  
tharge and six other Minerals. When used on the Decks  
or Bottoms of Ships, it is equal to a coat of Stone, and  
quite equal to Copper, no worms will ever effect it, and  
cheaper than any other paint.

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur,  
three parts Mineral Paint, mix with Coal Tar and apply  
it hot.

For sale by all Ship Chandlers and Tradesmen, in box  
of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal  
to covering them with a coat of Stone, being perfectly  
Fire Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE:—Mix three parts Mineral Paint with one part  
white lead, thin with Linseed oil: if a lighter color is  
wanted, mix less paint, more lead.  
ROOF:—Five parts of Mineral Paint, one part white  
Lead; mix with Linseed oil. Put it thick on a tin Roof  
one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
G. T. FOTQUE, Superintendent.

**WORKS, North Beach; Office, 599 Sac-  
ramento st., San Francisco.**

FOUNDRIES & MACHINE SHOPS.

**PALMER, HANSCOM & CO.,**

**GOLDEN STATE IRON WORKS,**

No. 19, First Street, San Francisco.

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

**To Quartz Miners.**

**Knox's Improved**  
**AMALGAMATING PAN,**  
WITH

**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST  
complete amalgamation of the precious metals of  
any process now known.

By it steam is introduced in the most effective and eco-  
nomical manner, while it is peculiarly adapted to the  
catching of floating gold and silver, known to be other-  
wise lost. Made exclusively by

**PALMER, HANSCOM & CO.,**  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

JOHN P. GALLAGHER.....JOSEPH H. WEED.

**GALLAGHER & WEED,**

**BRASS & BELL FOUNDRY**

AND

**LOCK FACTORY.**

No. 126 First Street, opposite Minna, next door to Pacific  
Foundry, all kinds of

**Brass and Composition Castings and**  
**Finishing, done with neatness and**  
**dispatch.**

**CHURCH and STEAMBOAT BELLS, OF ALL SIZES**  
Made to order. Engine's Gongs made and hung in  
the best manner. Bank, Vault, Store and Prison  
Locks, also brass Bollocks and Ship Locks of various  
patterns, on hand and made to order.

Particular attention given to casting Rudder Bra-  
ces and Ship Work in general.

All Jobs promptly attended to.—Prices  
moderate.

Removed from Oregon street, between Front and Davis.

**Miners' Foundry**

—AND—

**MACHINE WORKS,**

First St., between Howard & Folsom,

SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS MACHI-**  
**nery, the Best and Most Economical, manufactured**  
in the state of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgama-  
tors and Water Wheels—some in operation and on exhibi-  
tion.

Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.

All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere

**HOWLAND, ANGEL & KING**  
San Francisco, February 23, 1863.

**San Francisco Machine**

....AND....

**IRON WORKS!**

Northeast corner Fremont and Mission Streets.

**ALL KINDS OF MACHINERY MADE TO ORDER ON**  
most reasonable terms.

Steam Engines, High and Low Pressure; Quartz  
mills, Saw mills, Mining Pumps, Hoisting machines for  
mining purposes, Wine Presses, Agricultural implements  
etc, etc, and Castings of all descriptions made to order  
Steam Engines exchanged for new by

**DEVOR, DINSMORE & CO.**

REPAIRING promptly attended to.

**FOR SALE.**

San Francisco, July, 1863. Jy13

FOUNDRIES & MACHINE SHOPS.

**VULCAN IRON WORKS COMPANY**

P. Torquet, Manager,

**STEAM ENGINE BUILDERS**

and

**BOILER MAKERS,**

**Iron Founders and General Engineers,**

No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing  
Machinery.

Shoes and Dies of the hardest iron,

Russia Iron Punched Screens.

Steamboat Machinery: Saw, Flour and Sugar Mills.

High and Low Pressure Boilers of all Styles.

Vertical and other Turbine Water Wheels with latest  
improvements.

**W. T. & J. GARRATT,**

**City Brass and Bell Founders**

Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE**  
**and Lift Pumps, Church and Steamboat Bells, Taver-**  
**ern and Hand Bells and Gongs, Hose and all other joints,**  
**Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,**  
**HYDRAULIC PIPES and NOZZLES for MINING PUR-**  
**POSES, Iron steam pipe furnished with fittings, &c.;**  
**COUPLING JOINTS of all Sizes. Manufacturers of Gar-**  
**ratt's Patent Improved Journal Metal.**

**D. MORRIS,**  
**MACHINE SHOP,**

227 Market, corner of Beale Street.

Manufacturer of

**WARRANTED FIRE-PROOF SAFES**

Mill Work, of all kinds made to order. All kinds of  
Repairing done at moderate prices. Jc13

**LEWIS COFFEY AND RISDON,**  
**STEAM BOILER AND SHEET IRON**  
**WORKS.**

The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.

Old Stand, corner Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

**LEWIS COFFEY J. N. RISDON.**

**THEODOR KALLENBERG**

**Maker of Models**

**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophical**  
**Instruments, Scales, Weights, etc.; Steel**  
**Stumps, Dies and Die Sinking, Embossing Stamps.**  
Repairing of Machinery promptly attended to.  
**No. 418 Market street, San Francisco.**  
n7.3m) San Francisco.

**HIRAM WRIGHT,**

**PICK MAKER,**

Has established a Manufacture for the Making of  
**MINER'S PICKS,**

**NO 121 BUSH STREET, SAN FRANCISCO,**

[Between Sansome and Battery.]

WHERE can be had a superior Pick for Miners use  
As he manufactures all his picks under his own personal  
superintendence, he warrants them as being made of the  
best material and by the best workmanship.

Orders attended to and filled promptly and with dis-  
patch. aug17

**WRIGHT'S PICKS.**

**JOHN WRIGHT, of Sacramento, has established him-**  
**self in San Francisco, for the manufacture of every**  
**description of PICKS, of the best material, at reduced**  
**prices. PICK EYES of the best iron furnished in any quan-**  
**tity, at low rates. Orders from the country promptly**  
**attended to. N. B.—None genuine unless stamped with**  
**my name.**  
**JOHN WRIGHT, 511 Market street,**  
**Opposite Battery, San Francisco.**

**CALIFORNIA TOOL WORKS!**

**John Weichhart,**

Manufacturer of

**All Kinds of Edge Tools, Etc.,**

Plane Irons

Moulding Irons,

Stone Cutter's Tools, etc

No. 22 Fremont street, bet Market and Misale  
San Francisco, July 14, 1863.

**PATENT CLAIMS.**—We will furnish, on application, the  
claim of any invention that has been patented within the  
last fourteen years. The name of the patentee—date of  
patent, when known, and two dollars for copying  
should be sent.

**MODELS.**—Inventors will please attach to all model  
sent to us, their names and address, in a legible, per-  
manent form, this will avoid confusion and prevent  
errors.

**DRAWINGS.**—We have highly talented and efficient  
Draughtsmen, by whom drawings of every descriptions  
are executed in the best style of art, with promptitude,  
and at a moderate cost.

**WANTED**

By a competent person, the Secretaryship of four  
Mining Companies. Books to be kept at the Office of the  
Mining and Scientific Press, No 57 Government House,  
enquire as above. oct6

**SOUTH PARK**

**Quartz Mill and Reduction Works,**

**GOLD AND SILVER ORES WORKED AT REASON-**  
**able rates, and Working Assays made of small**  
**lots. All kinds of ores crushed at short notice.**

**J. H. SMITH & CO,**

Office in Shiel's Block, opposite Masonic Temple.

**S. F. CLOUSER, Secretary.**

**W. W. HANSCOM,**

**Steam and Mechanical Engineer,**

Designs furnished, and Drawings made for  
Engines, Mills, Water Wheels, Mining Ma-  
chinery, etc., etc.,  
**At Golden State Iron Works,**

aug x First Street, San Francisco.

**Eye, Ear and Throat.**

**DR. DE CASTRO,**

**Oculist and Aurist,**

**WHO HAS PRACTISED IN NEW**  
York and all the principal cities of Europe with  
such unrivalled success, and from each place is in pos-  
session of the most eminent testimonials, may now be con-  
sulted upon diseases of these delicate organs, with a view  
to their permanent cure. Deafness of long standing tho-  
roughly cured. The Doctor employs his (by the Medical  
Society of London approved)

**Self-adjusting Artificial Tympanum,**

For the relief of deafness, attended by loss or injury of  
the membrana tympani, and for the cure of discharge  
from the ear—the invention of Dr. Castro, M. D., author  
of "Deafness Practically Illustrated as to its Nature and  
Treatment," etc.

The self-adjusting Artificial Tympanum was first intro-  
duced to the notice of the profession at the meeting of the  
Medical Society of London, on the 20th of November,  
1863. An animated discussion ensued on the reading of  
the paper, and several members of the Society bore testi-  
mony to the success of the remedy and the importance of  
the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-  
Adjusting Artificial Tympanum, as he had observed the  
immense benefit a young lady friend of his had received  
from it. She was in fact, quite deaf, and in a most mis-  
erable state; the effect of the tympanum was instantane-  
ous—quite like a miracle. Five more testimonials from  
Members of the Medical College, New York, and the prin-  
cipal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and  
Kearny streets, Entrance on Market street.

**12. Mr. Editor.—Having been afflicted**  
with deafness for the last two years, originating from a  
severe cold, and for the last month suffering from the  
most excruciating pains in my ear, I was obliged to come  
down to San Francisco to seek relief. After a physician's  
recommendation to wait on Dr. De Castro, on the corner of  
Kearny and Market streets, and underwent one operation,  
and it was with the utmost pleasure I can say my hearing  
was suddenly and without pain entirely restored. I deem  
it my duty to make this known to the public, and to re-  
commend Dr. De Castro's skill as an aurist.

**JOHN REESE, Napa Valley.**

James Callaghan, witness.

San Francisco, July 30th, 1863.

[From the Daily Alta.]

San Francisco, June 30th., 1863.

**ED'S DAILY ALTA:**  
Permit me through your widely circulated journal, to  
say that my daughter Mary Ellen, has been afflicted with  
deafness since she was thirteen months old, and that she  
has been a member of the Deaf and Dumb Institute since  
it was organized. On taking her to Dr. De Castro, on the  
corner of Kearney and Market Streets, and undergoing un-  
der his direction, two operations, she has heard sounds  
very distinctly; and is now, I am happy to state in a fair  
way to get permanent relief. The result, thus far, is sat-  
isfactory; and I deem this notice due to Dr. De Castro for  
his skill; and would recommend all parties similarly af-  
flicted to give him a trial. My daughter has at different  
times been under the care of the most skillful physicians  
and aurists in California, but up to the period of visiting  
Dr. De Castro, received no benefit.

**CHAS JOHN P. WRIGHT,**

812 Green Street,



## MINING NOTICES.

**Wide West Copper Mining Company, Office, 528 Montgomery Street, San Francisco, September 10, 1863.**—Notice is hereby given that an assessment of Twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, and payable immediately, in U. S. Gold Coin, to the Secretary, at the office of the Company, or to J. M. Pike, Superintendent, at Copperopolis.

By order of the Board of Trustees,  
M. G. ELMORE, Secretary.

**Bald Eagle Gold Mining Company, Gold Flat District, Nevada County, Cal.**—Notice is hereby given that an assessment of Twenty-five cents per share has this day, (September 9th, 1863,) been levied by the Board of Trustees on the Assessable Stock of the above named company, and payable immediately in United States Gold Coin to the Secretary at his office, or to T. S. Smith, Superintendent, Grass Valley, Nevada Co.

By order of the Trustees,  
T. L. BIBBINS, Secretary, 105 Montgomery Street.  
sep13lm

**Notice is hereby given that an Assessment of ten (10) cents per share on each and every share of the Capital Stock of the Buena Vista Gold & Silver Mining Company—Fort Pitt Lodge, Prince Royal District, Humboldt County, Nevada Territory—was this day levied, payable immediately in U. S. gold coin, to the Secretary at No 413 Montgomery street, San Francisco.**

By order of the Board of Trustees  
H. B. MINOTT, Secretary.  
September 22, 1863. sep28

**Silver Butte Consolidated Silver Mining Company.**—The regular annual meeting of the Silver Butte Consolidated Silver Mining Company will be held at the office of the Company, No 528 Montgomery street, on FRIDAY EVENING, October 3, 1863, at 7½ P. M., for the election of officers for the ensuing year. A punctual attendance is requested.

By order of the board of Trustees,  
M. G. ELMORE, Secretary.  
San Francisco, September 29, 1863. oct12

**Emmet Copper Mining Company.**—Notice is hereby given that at a meeting of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No 528 Montgomery street, San Francisco, October 1, 1863, an assessment of twenty cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to T. LYONS, Superintendent, Copperopolis.

By order of the Board of Trustees,  
M. G. ELMORE, Secretary.  
oct12

**Dona Carolina Gold and Silver Mining Company.**—Notice is hereby given that at a meeting of the Trustees of the Dona Carolina Gold and Silver Mining Company, held this day, an assessment (No. 2) of fifty cents per share, on each and every share of the capital stock of the company, was levied payable on or before October 1, 1863, in U. S. gold coin, to the Secretary at office of the Company.

The regular annual meeting of the stockholders of the company will be held at their office, MONDAY EVENING, November 1, 1863, at 7½ o'clock.

By order of the Board of Trustees,  
M. G. ELMORE, Secretary.  
San Francisco, September 29, 1863. oct19

**Ruth Windsor Tunnel Company, Esmeralda district.**—Notice is hereby given that an assessment of fifty cents per share was levied on the capital stock of the above company on the 21st day of September, 1863, payable immediately to the Secretary at his office in United States gold coin.

By order of the Trustees,  
T. L. Bibbins, Secretary, 305 Montgomery St.  
San Francisco, October 13, 1863.

## Mining Shares For Sale

BY

O. A. CRANE,

Office 28 Government Block.

- 475 Shares U. S. Mining Company, Virginia City.
- 910 Shares Granada Gold and Silver Mining Company, Virginia Hill, Virginia City.
- 168 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.
- 20 Shares Mohave Mining Company, La Paz District, Colorado, N. M.
- 30 Shares Aspinwall Gold and Silver Mining Company, Devil's Gate District, N. T.
- 75 Shares Washington Copper Mining Company, Indian Bar, Tuolumne Co.
- 228 Shares Montezuma Gold and Silver Mining Company, Inyo District, Tulare Co.
- 90 Shares Owen's County Consolidated Gold and Silver Mining Company, Inyo District, Tulare Co.
- 50 Shares Crown Point Ravine Gold and Silver Mining Company, Virginia District, N. T.
- 10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California.

## AGENTS WANTED.

We want a good Agent in every city, town and settlement, on this Coast. Applicants will send their names with reference, when specimen numbers of the **Mining & Scientific Press** will be forwarded to them, and their names added to our published "List of Agents."

EWER &amp; SMITH.

## PARTNER WANTED.

The Proprietor of one of the oldest and most profitable country newspapers in the State is desirous of taking in a partner. He wants to dispose of one-half of his office to some gentleman well calculated to take charge of the editorial department, as he is a practical printer himself. For further particulars enquire at this office.

oct4

## A. C. MORSE,

Mining and Real Estate Agent,

Office—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS** WITH MINER S. MARTIN ESQ., one of the principal stock brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District.

**Utica Gold & Silver Mining Company,** Office 628 Montgomery Street, San Francisco, Sept. 18, 1863.

Notice is hereby given, that in accordance with the laws of the State of California, and the resolutions adopted by the Board of Trustees of the Utica Gold and Silver Mining Company, Esmeralda District, there will be sold at Public Auction, at the Office of the Company of Friday October 23, 1863, at 10 o'clock A. M., so many delinquent Shares of the Capital Stock of the Utica Gold & Silver Mining Company, standing in the names of the following named persons, as will be necessary for the payment of the assessment of ten cents per share, levied June 12, 1863, and two dollars per share levied August 10, 1863, together with cost of advertisements and expense of sale, unless said assessments with accruing charges are previously paid:

Names.	Certificates.	Shares.	Amount.
L. B. Lott, " "	7,	20,	42.00.
G. L. Church, " "	11,	20,	42.00.
G. H. Gray, " "	19, 25,	40,	84.00.
J. F. Gilbert, " "	27, 31, 34,	180,	360.00.
	29, 32, 35,		
	30, 33, 36,		
F. A. Baker, " "	37, 40, 43,	180,	378.00.
	38, 41, 44,		
	39, 42, 45,		
G. L. Church, " "	47, 53, 54, 55, 56,	25,	72.00.
Geo. Morrow, " "	62, 63,	15,	30.00.
J. Meyer, " "	68,	5,	10.00.
J. Kamsler, " "	69,	5,	10.00.

G. L. WALRATH, Secretary.  
San Francisco, Sept. 18, 1863. 1m

## Fire Hose! Fire Hose!! Fire Hose!!!

J. P. D. WILKINS,

The celebrated HARNESSE MAKER of Stockton, makes FIRE HOSE, from the best material, and WARRANTED at a trial of the Weber Steam Engine Co., No 3, of the city of Stockton. This Hose is manufactured at his establishment, and known to stand a pressure of 125 pounds to the square inch; as certified by the Chief Engineer.

## ALSO FOR SALE,

All kinds of HARNESSE and SADDLERY, at the lowest cash prices. REPAIRING done promptly, one door west of the Main Street Stable. oct12

## MINING &amp; SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper commenced Sept. 11, 1862. It is intended that every number shall be replete with information concerning Mining, Scientific, Mechanical and Industrial pursuits, together with several original engravings of new inventions, prepared expressly for its columns. This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

## The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietors having had great experience as Patent Agents, together with facilities at Washington that enable them to obtain Patents with dispatch.

## The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its columns will from time to time contain original engravings of new machines and inventions, together with a large amount of reading matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

## The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

## To Chemists, Architects and Millwrights.

This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

## Terms.

To mail subscribers.—Four Dollars per annum;

## Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

EWER &amp; SMITH, Publishers,

Room 57, Government House, Corner of Washington and Sansome streets, San Francisco.

## MINING CARDS.

## OWEN'S RIVER CANAL COMPANY.

Capital Stock.....\$1,000,000.

10,000 Shares.....\$100 per Share.

A Portion of this Stock is no offered to the public, and recommended as an investment.

**FULL PAID AND UNASSESSABLE**  
Stock, also Assessable Stock, can be obtained of A. J. DOWNER & CO., the authorized Agents of the Company,  
406 Montgomery street.

President.....R. S. WHIGHAM.  
Secretary.....W. FISK HICHOCK.  
Treasurer.....MONTGOMERY GOULY.  
Superintendent.....WILLIAM FLEMING.  
Engineer.....J. E. CLAYTON.

TRUSTEES:  
R. S. WHIGHAM, formerly of Whigham's Mill, Nevada City.  
WILLIAM FLEMING, of San Francisco.  
SPEER KIDDELL, Paying Teller of Parrott & Co's.  
ISAAC SWAIN, of A. J. Downer & Co.  
WILLIAM P. PRATT, of Fish & Fogg.  
Office of Company 328 Montgomery street  
28sep

JOHN ARMSTRONG. WM. P. WILDER.

## ARMSTONG &amp; WILDER,

VIRGINIA CITY, N. T.

## SEARCHERS OF RECORDS

for Mining Claims &amp; Real Estate.

## RELIABLE ABSTRACTS

guaranteed at reasonable prices.

## LETTERS OF ENQUIRY

promptly answered.

ALEXANDER STOTT,  
MINING SECRETARY,

512 Sansome Street, San Francisco.

Secretary of—

HORSE SHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

## T. C. Sanborn &amp; Co.

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

## OPHIR SILVER MINING STOCK,

GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

J. F. MILLER.

W. C. COLEY.

## MILLER &amp; COLEY,

Stock Brokers & Mining Agents  
327 MONTGOMERY STREET,

Between California and Pine, in Jerome Rice & Co's Real Estate Sales Rooms, San Francisco.

**ALL KINDS OF STOCK AND MINING Business attended to with Promptness and Dispatch**

aug17

## L. F. LELAND,

## STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.  
Member of the San Francisco Stock and Exchange Board  
je-29

## AGENCY

For the Purchase and Sale of

## MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.  
je13

WM. FAULKNER.

## New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

SHEATHING COPPER;

BRAZIER'S COPPER;

COPPER BOLTS;

YELLOW SHEATHING METAL;

COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.  
MORGAN, STONE & Co  
108 Front Street, San Francisco.  
je-29

## BUSINESS CARDS.

## Napoleon Copper Mining Company.

Capital Stock.....\$1,620,000.  
2,700 Shares---\$600 Per Share.

Length of Lead 2,700 Feet; Location of Mine, Gopher District, Calaveras county; Incorporated October 8, 1862.

President.....F. MACCRELLISH.  
Secretary.....R. C. ALDEN.  
Treasurer.....R. G. BROWN.  
Superintendent.....A. W. HASKELL.

## TRUSTEES.

F. MACCRELLISH, of Alta California.  
A. J. MOULDER, of A. J. Moulder & Co.  
R. G. BROWN, of Grover & Baker S. M. Co.  
J. C. DUNCAN, of Duncan & Co.  
R. C. ALDEN, U. S. Commissioner Department,  
J. W. TUCKER, of J. W. Tucker & Co.  
W. A. WOODWARD, of Alta California.  
S. E. HOLCOMBE, of Holcombe Brothers.  
W. L. DUNCAN, Secretary California Pioneers.  
Office of Company, No. 420 Montgomery street.  
je-29

THE EUROPEAN  
ORE REFINING  
COMPANY.

Quartz Mill and Furnaces, Bryant Street,  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF

## ORES AND MINERALS.

In large or small quantities, for such Experienced Treatment by the  
**LATES EUROPEAN METHODS,**

As may be ascertained by

## CAREFUL ANALYSIS,

At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.  
The South Park, and Folsom and Kearny street Cars pass Bryant street.  
au31

## The Pacific Mineral Company

**MAKE LIBERAL ADVANCES UPON THE ORES OF**  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-4f Montgomery Street, San Francisco.

## MARTIN &amp; Co.,

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

## Purchase of Copper Ores,

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Stocks will be furnished and Freight Paid on all consignments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,  
New York. San Francisco.  
San Francisco Post Office, Box 1259.  
je 1.

## H. C. KIBBE,

## MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

## NORTH BEACH QUARTZ MILL

and

## REDUCTION WORKS

Are prepared to work Gold and Silver ores, in large or small quantities.

Working assays made of small lots, and all kinds of ores crushed at short notice.

Our new and complete Machinery, will enable us to give results fully up to the merits of rock.

WHEELER &amp; THAYER, Proprietors.

C. C. JONES, Amalgamator.

San Francisco, Oct. 12, 1863.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VII. SAN FRANCISCO, MONDAY EVENING, NOVEMBER 2. 1863. NO. 1.

### REMOVAL.

The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing more room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.

### SALT AND SALT MINES.

One of the facts of scientific interest brought to light by the Southern rebellion is the discovery of an important deposit of rock salt of remarkable purity in the island of Petite Anse, in Vermillion Bay, on the Gulf Coast of Louisiana. Salt springs had been known on the island from an early period, but no suspicion existed of there being rock salt near the surface until the late owner, with the view to improve the flow of water from one of the saline springs, caused an excavation to be made, when at the depth of *only fourteen or fifteen feet* from the surface, the laborers struck a bed of white rock salt, which they at first imagined to be ice. There was no moisture or brine in the deposit, the salt being compact, hard and perfectly dry. It was at once recognized, and has since proved of incalculable advantage to the Confederates, as well as a source of great wealth to the owner. The above facts, as condensed from an Eastern exchange, should be a matter of great encouragement to the owners of the "Salt Spring," noticed in our last issue as having recently been discovered in the neighborhood of Virginia City. It was with no little surprise, when conversing with one of the proprietors of this spring, a few days since, that we learned that no efforts have been made to seek for the deposit of rock salt from which this spring, of such intensely salt water, must flow. The locality of the ground and other circumstances are such as to lead to a reasonable supposition that a very slight excavation would, undoubtedly, lead to the most valuable deposit of rock salt ever discovered, and that too, at probably a mere moiety of the expense which would be required for putting up the necessary works for evaporation, etc., which must otherwise be done to render the spring available.

If our memory serves us, it is now several months since this discovery was announced, and yet, as we learn from parties acquainted with the locality, no steps have been taken to turn the same to profit. Perhaps the owners are not aware of the prize they have found. If not, it is to be hoped that some enterprising capitalist may step in and turn to profitable account a discovery, which must soon become of great importance to that region. The consumption of salt in the neighborhood of Virginia City, for domestic and chemical purposes, is already very large and must soon become immense. Its production at so convenient a point ought to bring about a most important reduction in the present price of the article, and by so much, will it become a public benefit to the district, besides a large source of revenue to its fortunate owners, whoever they may be.

### GOLD MINING NEAR PLACERVILLE.

We have several times, during the past season, had occasion to refer to a mining district, known as Poverty Point, a short distance from Placerville, to the north, and on the American River. One of the richest claims in this district, the New El Dorado, has been tied up in law for nearly a year. The case will soon come to trial, however, and the question of title so settled that the work of opening and developing the mine can once more be resumed. The New York Co., who hold an extension of this lead, are now crushing 25 tons of rock per each 24 hours. Their stock is selling in this city at \$150 per share.

The Harmon Gold and Silver Mining Co., which is now almost daily quoted in the stock reports of this city, is also located in this neighborhood. The original locators of this claim were Kenney & Harmon, who have worked the claim constantly with arrastras since 1853. They have recently sold three-quarters of their interest to San Francisco capitalists, who have organized the present Company, and are now putting up a 15-stamp mill, to be run in connection with a set of Eddy's Electrical Amalgamators (using Wheeler's Pans,) the whole to be in operation about the middle of the present month, and to be driven by a 25-horse power engine. They have a 40-foot shaft on their ledge, the rock from which is paying from \$25 @ \$30 in the arrastras. They are also running a tunnel to the vein, through which ore will be taken direct to the mill. Mr. Charles W. Moulthrop is the Superintendent for this Company. This stock first made its appearance in this market, some three or four weeks since at about \$25 per foot. Since that time it has been gradually advancing until to-day we quote it at \$52. They have about 250 tons of good pay rock now on the ground, and will continue to increase their supply of ore until the mill starts. The business office of this Company is at room No 11, Athenaeum Building, in this city.

The Niagara, north extension of the New York, is highly spoken of. They are soon to have 100 tons of rock crushed as a test of the value of their mine. The Dardanelle, west extension, recently took \$1,300 from 10 tons of rock crushed at the Poverty Point Mill. The St. Louis is located in the same neighborhood, also the Quartz Mountain with 600 feet of tunnel and the Massasoit, with 25 tons of rock out and ready for crushing. The Baltic recently made a trial test of their rock with a result of \$22.50 per ton. This is one of the most promising Quartz Mining District, in this State.

THE NEW MECHANIC'S INSTITUTE.—This new building was formally opened to the members on Wednesday evening last. Quite a large number were in attendance. We looked in vain, however, for the presence of many, who should have been there to have given their moral and material aid to an enterprise which promises to be of such vital importance to our city and state. The Library of the Institute is quite large and well selected, and we doubt not that as the long winter evenings approach, this place will be a favorite resort for the mechanics of this city.

A church in Prussia, holding 1000 persons, has been constructed, statues and all, of *paper mache*.

### COPPER IN OREGON.

Dr. Paul d'Heiry, a gentleman well known in this city, has placed in our cabinet several fine samples of copper ore from a lead in Josephine County, Oregon, known as the "Queen of Bronze." One of these specimens consists of the ordinary yellow sulphurets, the other differs materially from any copper ore we have before met with on this coast. It is an antimonial sulphuret of copper, and is found in immense masses, as an outcrop, covering a fine ledge, four feet thick, of sulphurets. The company, which is a private enterprise, under the superintendence of Dr. Heiry, owns, besides the one above described, another, and a parallel ledge, about three hundred feet distant, with a well defined lead of sulphurets, 14 feet thick.

These ledges run due east and west with a perpendicular dip. They are located just above the California State line, and about sixty miles from shipping at Crescent City. The proprietors intend to erect two reverberatory furnaces upon their mine, early the ensuing Spring for the purpose of reducing their ore to regulus. A smelting furnace will subsequently be added in which the regulus will be reduced to ingots, before shipping. The Dr. informs us that an abundance of most excellent material is found upon the spot for making the firebrick which is necessary for such furnaces. There is every indication that the mines must soon become very valuable. The contemplated experiment of smelting the ore at the mine is quite an interesting one at this time, and we shall watch, with much interest, for further result.

THE REFUGIO MINING COMPANY.—The mines of this Company are located in the celebrated Jesus Maria, of the Sierra Madre, in the State of Chihuahua, Mexico, and about 250 miles from the port of Guymas. There is a good wagon road two-thirds of this distance, with a pack trail for the other third. Freight for this city costs about \$100 per ton. A steam engine of sufficient power, with a 20-stamp battery, barrels provisions, tools, etc, went down on the Oregon, on the 15th inst. The mill will be running by February. The entire cost of this "plant" will be \$20,000. The mine will soon be in condition for raising a large amount of ore. The ore is argentiferous, carrying a large value in gold and is very docile in reduction. The Mexican patio process is now in operation at the mine, with a result of about \$125 to the ton. The mine is under the superintendence of Captain Taylor.

MINING EXCHANGE BOARD AT STOCKTON.—A Stockbrokers' Board has been organized at Stockton on a "new principle." Says the *Independent*:

Instead of the *à la voce* bids of Stock Boards, the offers of stock and bids will be accomplished through an ingeniously arranged bulletin board, which will always be lying upon the table in the rooms of the Board, the contents of which will be published every morning in this paper, thereby giving the members wishing to sell, the full benefit of this market.

In the Arctic regions, where the thermometer is below zero, persons can converse at more than a mile distant. Dr. Jamieson asserts that he heard every word of a sermon at the distance of two miles.



## REESE RIVER CORRESPONDENCE.

AUSTIN, OCT. 25, 1863.

EDITOR OF THE PRESS.—Since my last, I have been active in my travels over the mines, and I can see nothing to detract or withdraw from previously expressed opinions; on the contrary I am now more fully convinced of the extent and richness of the mines of this country, than ever. All we want is good practical workmen in our mills. This will take time and experience, for our rock is unlike other ore, and it cannot be expected that men can be found who will at once, under those circumstances, bring out all the metal. We ought not to expect too much. I don't believe in an onslaught which like the whirlwind will sweep down every effort to reach perfection or success. It is the object of mill-owners, and their interest, to do the best within the reach of human efforts, and I doubt not, that in a short time, complaints will be less frequent.

The mills, with one exception, have been running this week and doing good work, though idle the week before. This exception applies to Austin & Duff's Mill. I understand Mr. Austin has sold out his interest in the mill, and bought an interest in a foundry in San Francisco. Report says, he has made his "pile."

The work on the mines is being pushed forward as fast as circumstances will admit.

## BIG CREEK DISTRICT.

There is an excitement about Big Creek District, some 15 miles south of Austin. It has a ten-stamp Mill under completion. The ledges are wide. The district contains a stream of water running on the average, 700 inches of water.

Cañon City, at the mouth of Big Creek Cañon, is growing rapidly, and I might here inform absent owners of city lots that they had better look to their interest by taking actual possession, if they would hold them. Parties have attempted the jumping process in Austin, but not to their entire satisfaction, so they have gone down to Cañon City, where they can play that game to a better advantage. That place, it is universally conceded, is bound to be a place of importance. It is but three miles further from Jacobville, than this place, consequently about as accessible to the western markets as Austin. At Jacobsville on the river and on the overland road, leading to this place, there is a mill in full operation, said to be of the first class. It has been but recently completed, and report speaks favorably of it.

North of Clifton,  $3\frac{1}{2}$  miles, is what is called San Francisco Cañon, where parties have laid out a city, which they call New York. I understand an order has been given for a mill to be erected in the Spring. For convenience this section is called San Francisco Cañon District, to distinguish it from Yankee Blade Section. There are many first class mines there, such as the Lady Adams, Potosi, Scalvonia, Magenta and Muggins. The Lady Adams has an incline over 100 feet. The ledge is but 12 inches wide, and rich in bromides. It stands in good repute. The Scalvonia has a wide ledge, full seven feet and widening rapidly in its descent. I believe it is a good ledge. The Magenta has a tunnel over 35 feet deep, and has a well defined ledge, and I pronounce it of the first class. The Vingaui, still nearer Clifton, is classified with some of the best. I found an incline about 45 feet, ledge 14 inches wide. Pizaro, on the same slope of the mountain is a well defined ledge, presenting the appearance of several veins grouped together; ledge six feet wide; rock hard requiring blasting.

In the hill over beyond the Yankee Blade has been found a ledge called the Oronoco, where almost on the surface is found what is called water-line rock, from the fact that heretofore it has been found only when they strike water, in the shaft, and it is an indication of first class rock. This is what all are desirous to find in sinking a shaft, and it immediately establishes the reputation of the mine. What may be expected on this ledge, when they reach water level, it is fair to presume will be gratifying. The rock resembles the Ontario, and assays \$1690 per ton; ledge six feet wide on the top, and perfectly uniform in quality. The town is growing as if by magic, and the streets crowded with teams and men; presenting for a short distance on Main St., more of a crowded mass of humanity and horse-flesh than on Montgomery Street, in your city.

"Y. I. D."

The use of the ramrod in drilling troops has been dispensed with in England. The reason of this is, the steel ramrod causes the the wear of the rifled barrel by friction.

MOKKUMNE HILL, CALAVERAS COUNTY, }  
OCT. 10TH., 1863. }

MR. EDITOR.—In my last I spoke of our Placer & Quartz Mining, and will now say something of copper, as we have some of that also. And let me tell you that the copper region is not confined to Copperopolis and Campo Seco districts, but is to be found in various portions of our county. There are those who think it is not to be found in paying quantities outside of the above mentioned districts, but they are the veriest Tyros in the knowledge of copper and copper mining.

Some three years ago I predicted the discovery of copper ore east of Bear Mountains and parallel with the Copperopolis lode, also in the San Domingo district. In each of those places, the prediction has been verified.

In the San Domingo district several good claims are now partially opened, and promise, ere long, to be among the best in the county. I will mention now but the following, which are in active operation: the Noble, San Jose, Star, German Hill and Clincher Claims.

The Noble Company has lately erected a steam pumping engine, on their claim, and are now in a fair way of working. Ten thousand dollars have been offered, and refused, for an original interest in this claim.

The German Hill Company has also struck some very fine sulphurets and black oxide, at a depth of thirty feet, in their claim.

The Star Company has struck the same quality of ore as the German Hill, but in greater quantity at the same depth. They have several veins varying from four inches to two feet in width, with good shipping ore as it comes from the shaft.

The Clincher Company is now getting good looking rock at a depth of seventy feet, and as it is located between the Star and German Hill claims, no doubt is entertained of striking the same quality of ore as those claims are now getting.

There are a great number of other claims in this district, (San Domingo,) but those I have mentioned are the principal ones at present, and I propose speaking of one district at a time.

Copper mining, to be profitable, must be conducted by skillful workmen, and I am sorry to see so much neglect, or indifference, manifested by mining companies to this all important fact. I have noticed in a letter from some of your correspondents, statements to the effect that large amounts of money are frequently squandered in useless and unproductive labor upon mines, and that in some cases such mines have received much positive injury from such misapplied work. I could also mention numerous similar cases were it my business to do so. Now why is this the case? Simply because the Directors of Mining Companies are chosen without any thought as to their qualifications for such a position. A body of men qualified for mining directors, will be sure to have a competent man as superintendent, and competent superintendents give value to mines, from their systematic working of the same.

I fear this is already too long, and will close by saying that in my next I will speak of the "dressing" and concentrating of ores; but lest I should differ with your correspondent, J. P., will take time to consider.

AN OLD COPPER MINER.

GOLD MINING IN ENGLAND.—According to the General Summary of Mining Statistics in England for 1862, it appears that only one mine in England made any return of gold for the year 1862. At the present time according to a recent report, there are twenty-four workings named as gold mines. From a report before us of the Directors of the Vigra and Cloggan Mining Co., it appears that the Company are working for both gold and copper. At their gold workings they have introduced Mr. Mosheimer's Amalgamating Pans. Six of these pans are now employed at these works. According to the Report before us, these pans have recently been subjected to a working test with another operation, known as Britten's Machines, in which the Mosheimer Pan entirely outstripped its rival.

THE PIONEER.—The oldest quartz claim and mill in Nevada Territory is the Pioneer, located in Devil's Gate district. It was worked in 1857, first with rockers, and is still worked, paying \$40 per ton of rock, and gradually growing richer in silver. So says the *Enterprise*.

## IMPROVED MATERIAL FOR MACHINE BEARINGS.

Experiments have recently been made upon the London and Northwestern, the London, Chatham and Dover, and other railways, with an improved material for axle bearings. The alloy used consists of iron, copper, tin, and zinc, combined with a small quantity of sulphur, and sometimes also of arsenic. Convenient proportions are—iron, 2 parts; copper, 28 parts; tin, 40 parts; zinc, 130 parts; sulphur,  $1\frac{1}{2}$  parts; and arsenic, 1 part. If the arsenic be omitted, the quantity of sulphur should be increased. The proportions may be considerably varied. In carrying out the invention, it is proposed to take from thirty-two to forty parts of copper; then from two to seven parts of iron; then from fifteen to twenty parts of tin; then from one to two parts of sulphur; and from one-half to one part of arsenic, and mix or combine them together in a crucible, or any other suitable vessel, by first fusing or melting the copper; then add the iron thereto, well mixing them together; then add the sulphur, or the sulphur and arsenic, as the case may be, and again well mix them, afterwards add the tin, stirring the whole well together, and cast into ingots. The inventor does not intend, in all cases, to employ sulphur in the manufacture; for example, in some cases it may be used as a flux to render the amalgamation of the metals or alloys more perfect; in other cases it may be used to render the alloy hard, the quantity of sulphur being varied in the portions above stated, according to circumstances. He also employs the arsenic, either separately or in conjunction with the sulphur, for the same purpose, as above stated, for the use of sulphur varying the proportions. He uses these materials to form the first alloy, or hardening metal, but the above named quantities may be varied, to give this alloy the necessary degree of hardness, according to the purpose for which the improved material or alloy is to be applied. In the second part of his process he takes from eight to sixteen parts of this alloy, or hardening metal, and melts it in a crucible, or other suitable vessel, and when melted, adds thereto from seventy-six to one hundred and two parts of the best spelter or zinc; when that is melted and mixed with the alloy or hardening metal, he adds from twelve to eighteen parts of tin; the whole is then well mixed or combined together, in order to make the improved material or alloy complete; then casts it in the usual manner into the various forms as required. It is proposed to use the alloy as a substitute for gun-metal bearings, and as it can be sold at £84 per ton, Mr. Wm. Levett, the present holder of the patent, anticipates that it will be extensively adopted. From a trial on the London and Northwestern Railway, extending over seven months, during which time a pair of bearings were worked without renewal, it was found that the improved alloy (surfaces equal) lost weight at the rate of  $8\frac{3}{4}$  ozs. per month, whilst the gun-metal bearings, in the same carriage, lost 20 ozs. per month, and the amount of lubrication required with the new alloy was 20 per cent. less than with gun-metal. On the London, Chatham and Dover line, the results of two separate trials, also extending over some time, were even more favorable. Mr. Levett's alloy lost weight at the rate of  $7\frac{3}{4}$  and  $6\frac{1}{2}$  ozs. per month respectively, whilst the loss with gun-metal in the same carriages was  $16\frac{1}{2}$  and 16 ozs. respectively. Experiments are likewise being made upon other railways, the results of which we shall publish as soon as practicable.—*London Mining Journal*.

THE SHEBA.—The following item, from the Humboldt Register, will be interesting in connection with the recent movements in the value of this stock:

"The workmen in the 'Sheba' struck richer mineral, Tuesday night, Oct. 12th., than was ever before found in it. The ledge varies from four to six feet wide, and is beautifully defined and cased. It is supposed by practical men who had an opportunity of judging, that the men took out ore, Tuesday night, to the value of \$20,000. This confirms the statement we made last week—that practical men consider 'Sheba' better worth \$1,000 a foot now than it was ever before worth \$500. Sharpers will be after it, and at the same time undertake to keep it down. When they have once more got it in their own hands, look out for high figures for 'Sheba.' Their recent depression of it, and the reasons they quietly circulated for its going down, did much to injure the whole series of silver mines in this county.

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.



**HYER & Co.**—The above firm, who advertise with us to-day, are a branch house of the same name at Boston, Mass., who are the largest importers, in their line, in the United States. Having located a branch house in San Francisco, they are determined not to be undersold by any house on this coast. Call at 406 Battery street.

## G. E. MOORE,

Assayer and Analytical Chemist,

No. 612 Sacramento Street,  
HAYING ESTABLISHED A CHEMICAL LABORATORY, and furnished with every requisite for delicate analytical work, is prepared to execute the assay and analysis of ores, Mineral Waters, Guano, etc., with accuracy and dispatch.

REFERENCES:  
Prof. J. D. Whitney, State Geologist, San Francisco  
Alson & Co., San Francisco  
Sather & Church, San Francisco  
John Parrott, San Francisco  
B. D. Miles, Sacramento. sep14

## ASSAYS!

Promptness and Accuracy Secured  
By the Use of the Most Improved  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,**  
(FROM EUROPE.)

Room 24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. jly6

## RIEHN, HEMME & CO., ASSAYERS.

Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.

Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO  
Messrs. F. PATROT & Co., Messrs. ALSON & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.

CHAR. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
Assaying, also in Metallurgy and Chemistry as far as re-  
quired to become a practical Assayer.

## AGENTS WANTED.

We want a good Agent in every city, town and settle-  
ment, on this Coast. Applicants will send their names  
with reference, who will forward them to the Mining  
& Scientific Press, and be forwarded to them,  
and their names added to our published List of Agents.  
EWER & SMITH.

**EXCELSIOR IRON WORKS,**  
712 Sansome street,  
Between Jackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,**  
Manufacturers of all kinds of  
Architectural and Ornamental Iron Work,  
Bank and Store Vaults, Safes, Doors, Shutters, Bal-  
cony, Area and Cemetery Railings, Gates, Stairs,  
Etc., and all kinds of Blacksmithing and Job-  
bing done with promptness, and at  
Reasonable Prices.  
Orders from the country promptly attended to.  
jyl3

## New Style of Ladies' Buckle!

**W. BOHM,**  
INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the  
construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
possesses several very important improvements over any  
other in use.

The invention having been carefully examined at the  
Patent Office, has been adjudged to be a useful improve-  
ment, and Letters Patent have been granted for 17 years.  
It excels all other buckles in

### Usefulness, Strength and Appearance.

The Public is respectfully invited to call and examine  
this Buckle at the Jewelry Establishment of  
BRAYMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH, BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 1/2 Street, Sacramento.  
Agents for the Patentee.

Every Buckle sold, stamped "W. Bohm," will be  
guaranteed as to its Strength and Durability.  
jy 27 W. BOHM, Patentee.

## THE BRYAN BATTERY.

The vast interest involved in the reduction of area on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of the  
most reliable, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
case of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

### METHOD OF CRUSHING ORE.

The BRYAN BATTERY, as now constructed, is believed  
to constitute all the improvements which the experience  
of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent, more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their work in 1860, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two  
sizes, four and five Stamps each. The Four Stamp  
Battery weighing complete about 6,000 pounds,  
and the Five Stamp about 7,000. The Mortar Bed being  
cast in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico.  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill.  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico.  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico.  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

MANUFACTURED ONLY BY  
**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

os 135 to 136 First street, and 136 to 144

Fremont street.

## MINING & SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper  
commenced Sept. 11, 1862. It is intended that every  
number shall be replete with information, concerning  
Mining, Scientific, Mechanical and Industrial pursuits,  
together with several original engravings of new inven-  
tions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietor to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published.

### The Inventor!

Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having had  
great experience as Patent Agents, together with facili-  
ties at Washington that enable them to obtain Patents  
with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its col-  
umns will from time to time contain original engrav-  
ings of new machines and inventions, together with a  
large amount of reading matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.

### The Mining Interest!

Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of Mi-  
ning Stocks, new inventions of Machinery adapted to that  
purpose, and of everything generally that may be of ser-  
vice to the Miner.

### To Chemists, Architects and Millwrights.

This journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of in-  
formation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plan-  
ters will not be neglected, engravings will be given of  
agricultural implements, and the farming interest gen-  
erally will be amply discussed.

### Terms.

To mail subscribers.—Four Dollars per annum

### Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Names can be sent in at different times and from  
different Post-offices. Specimen copies will be sent  
gratis to any part of the country.

### EWER & SMITH, Publishers.

Room 57, Government House, Corner of Washington  
and Sansome streets, San Francisco.

## I. C. E. KLEPZIG & CO.,

## GUN MAKERS,

...AND...

DEALERS IN GUN MATERIALS,  
733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.  
Gilding, and also Silver Plating, by E. Ekland. jey21

## LEANDER RANSOM, Civil Engineer

AND

## SURVEYOR,

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

ALSO

## STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL  
LANDS,

At the low price of \$1.25 per Acre.

Terms.—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE, 328 Montgomery streets. oct-3

## D. NORCROSS,

Masonic Temple, No. 6, Post Street.

Military Goods of all Descriptions.  
Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.

aug 17

## PEOPLE'S OPPOSITION Steamship Line!

Special Notice.—The  
Line have been withdrawn from the Ni-  
caragua Route until further notice.

### GREAT REDUCTION IN RATES!!!

The Fast and Favorite Double Engine Steamship,

**MOSES TAYLOR,**

J. H. BRETHER,.....COMMANDEE

Will be dispatched for PANAMA

From Mission street Wharf.

FRIDAY, - - - - - NOVEMBER 13, 1863

Punctually at 9 o'clock, A. M., on

Connecting at Aspinwall, by the Panama Railroad, with the  
Splendid Steamship

ILLINOIS - - - - - 2500 Tons.

The Moses Taylor, since her last trip has undergone  
the most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins enlarged, refitted and  
repainted throughout—making her accommodations equal  
to any Steamer on the coast.

For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

## BOOK KEEPING, Penmanship

AND  
COMMERCIAL CALCULATIONS,  
Taught by J. S. LUTY

PRACTICAL ACCOUNTANT,

305 Montgomery Street, Corner of Pine.

### TO QUARTZ MINERS.

All persons interested in Mining Ma-  
chinery are invited to call at Donahue's Foundry and  
examine my improved Amalgamator. It is unquestion-  
ably superior to anything now known for amalgamating  
Silver and Gold. It works 1000 pounds at a time, and  
will amalgamate over three tons a day. By the motion  
of the revolving muller, the pulp is drawn through its  
centre and passes under it, between the grinding sur-  
faces, to the circumference: from whence it passes again  
over the muller to the centre, through the holes and be-  
tween the grinding surface to the circumference as be-  
fore. Thus a constant circulation of the pulp is kept up,  
bringing the particles of ore again and again under the  
muller, and reducing the whole mass to an impalpable  
powder.

No quicksilver lies between the surfaces to be ground,  
but at the circumference and centre of the pan where the  
metal must pass through it as the pulp circulates.  
A patent was granted for this Amalgamator in De-  
cember last, and all persons are again warned against  
purchasing machines made at the Miners' Foundry called  
"Wheeler's Amalgamator," as they are an infringement  
on my patent, and a suit is now pending in the U. S. Cir-  
cuit Court against the parties infringing. My Amalga-  
mators can be seen running at Donahue's Foundry, where  
all can judge of their operation and the very superior  
style in which they are being manufactured.  
sep21 THOMAS VARNEY.

## PATRONIZE HOME MANUFACTURIES!!!

### James Longshore,

### Trunk and Valise Manufacturer,

307 Sansome Street, under Tehama House. Trunks and  
Valises, Wholesale and Retail, Fine Sole Leather Trunks,  
Valises, and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
aug x

### APARTMENTS.

FURNISHED APARTMENTS, WITH, OR WITHOUT  
Board, at 1018 Powell Street, between Clay  
and Washington Street. Per-ous desirous of a respectable  
home will do well to apply. jye6

## FOR SALE.

### PATENT PRESSED RUSSIA IRON MINING PANS,

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Blow Cocks; Couplings; Play Pipes;  
Cooking Stoves and Heating Stoves;  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

### UNEQUALLED

### MONITOR COOKING STOVE

Or RANGE,

FOR HOTELS.

To which we call particular attention.

je-29

TAY, BROOKS & BACKUS.



THE MINERS' LABORATORY.—NO. XV.  
ASSAY OF SILVER ORES.

*Estimation of Silver contained in Lead Ores.* Many varieties of lead ore contain silver; consequently we will have to describe how to assay an ore of lead first, and then describe the method for obtaining the silver. The common ore of lead is Galena; 200 grs. of the pulverized ore is mixed with 200 grains of carbonate of soda, the mixture placed in an earthen crucible, smeared with black lead; into the mixture is inserted two or three ten-penny nails with their heads downwards; upon this is then placed about 300 grains of salt, and lastly about 200 grains of borax. The crucible and its contents is placed in a small wind furnace—heating very gently, until the whole is melted; then gradually increase the heat and keep at a high heat for about five minutes; remove the crucible from the fire and allow it to cool. Break the crucible, and at the bottom you will obtain a button of lead containing all or nearly all of the silver, together with what gold the ore may contain. The weight of this button, divided by two, will give the percentage of lead. The silver is separated by the process of *cupellation*; an operation founded on the fact that when an alloy of lead and silver is exposed to a current of air, when in a state of fusion, the silver neither gives off perceptible vapors nor becomes sensibly oxidized, whilst the lead rapidly absorbs oxygen and becomes converted into a fusible oxide.

In order therefore to separate the silver that may be present in buttons obtained by assay, as above, it is only necessary to expose them on some suitable porous medium, to such a temperature as will rapidly oxidize the lead. The litharge produced is absorbed by the porous body on which the assay is supported, and nothing but a small button of silver ultimately remains. These supports or cupels are made of bone-ash, slightly moistened with a little water, and consolidated by being pressed into a mould. Cupellation is conducted in a muffle furnace.

As soon as the muffle has become red hot, six or eight cupels that have been drying in the mouth of the opening are introduced by means of a proper tongs and the bottom of the muffle is covered with a thin layer of bone-ash, in order to prevent its being attacked in case of any portion of litharge coming in contact with it during the progress of the subsequent operations. The open end of the muffle is now closed by means of a proper door, and the cupels are thus rapidly heated to the temperature of the muffle itself. When this has been affected the door is removed and into each of the cupels is introduced, by the aid of a slender steel tongs a button of the lead to be assayed. The mouth of the muffle is again closed during a few moments to facilitate the fusion of the alloy, and on its removal each of the cupels will be found to contain a light metallic globule, in which state the assay is said to be uncovered. The lead is now quickly converted into litharge, which is absorbed by the cupel, as fast as it is produced, whilst at the same time there arises a white vapor that fills the muffle, and is gradually carried off by the door and through the openings in the sides and end. When nearly the whole of the lead has been removed, the remaining bead of alloy appears to become agitated by a rapid motion, which seems to make it revolve with great rapidity. At this stage the motion will be observed suddenly to cease, and the button after having for an instant emitted a bright flash of light becomes immovable. This is called the brightening of the assay, and a button of silver now remains on the cupel.

If the cupel was now abruptly removed from the muffle, the metallic globule would be liable to vegetate, by which a portion of the metal may be thrown off, and a certain amount of loss be thereby entailed. To prevent this, the cupel in which the assay has brightened should be immediately covered by another, kept red hot for the purpose. The two are now gradually withdrawn together, and after having sufficiently cooled, the upper cupel is removed, and the globule of silver detached and weighed.

From the fact that silver becomes sensibly volatile at very elevated temperatures it becomes necessary to make cupellations of this metal at the lowest possible heat at which they can be affected. The temperature best fitted for this operation is obtained when the muffle is at a full red heat, and vapors which arise from the assays curl gradually away, and are finally removed by the draught. When the muffle is heated to whiteness, and the vapors rise to the top of the

arch, the heat is too great; and when, on the contrary, the fumes lie over the bottom and the sides of the openings in the muffle begin to darken, either a little more fuel must be added or the draught increased.

If an assay has been properly conducted, the button of silver obtained is round, bright and smooth on its upper surface, and beneath should be crystallized and of a dead white color; it is easily removed from the cupel and readily freed from litharge. The globule is now taken out and flattened on a small steel anvil. The fuel may be either coal or coke, broken into small pieces.

When ores of lead, in addition to silver, contain gold, the button remaining on the cupel is an alloy of those metals. This button is heated with pure nitric acid, when the silver will dissolve leaving the gold undissolved; that is: provided the alloy contains two parts of silver to one of gold; if not, the acid will not attack the silver; should this be the case, the alloy, after weighing, is mixed with silver and cupelled with a small quantity of lead, and the resulting button is heated with nitric acid, the gold collected and weighed, and its weight deducted from the weight of the original button of gold and silver.

THE MONTE DIABLO MINES.

A large amount of work has been done, the past season, in the way of prospecting and developing the mines upon Monte Diablo. In addition to coal, it is now pretty satisfactorily demonstrated that copper, silver and gold exist, and probably in paying quantities, in that region.

During the past week, we have had an interview with Mr. W. P. Green, who has spent the entire Summer among the mines of Mitchell Canon, Clayton District, and who showed us indications and evidences that appear quite conclusive as to the value of the mineral deposits on this famous mountain. We examined among others, the following certificates:—

A working sample from 4,100 pounds of ore sent down from the "Rising Sun Claim," yielded at the rate of \$42 to the ton in silver and gold at Smith & Co's South Park Reduction Works.

The Good Will Co.—Six bags of ore weighing 300 pounds, and taken from the surface, yielded at the rate of \$20.10 to the ton—\$6.70 in gold and \$13.40 in silver.

Quaker City and Little Giant Consolidated—390 pounds worked, with a yield per ton of \$25.60, silver and gold. The rock was all from the surface; only eight days work has been done upon this claim.

The United Claim—Elephant Ledge—206 pounds of surface rock worked with a yield of \$14.60 to the ton. A sufficient amount of work only, has been done on this claim to hold it.

Malachite—Copper—A small lot of ore from this mine, taken to the Antioch Smelting Works, assayed 11 per cent., for which the Company paid \$22.50 per ton. The ore from this mine can be delivered at the smelting works at a cost of \$4 per ton for transportation.

These results speak most encouragingly for the mines of that region. In addition to the companies already enumerated, we would also mention favorably the Garabaldi—copper and silver; Open Sesame, (consolidated,) gold and silver; Great Republic, copper. The Pioneer No. 1, is about shipping ore to this city, the first lot of 20 tons having recently arrived.

The Union, gold, silver and copper, have gone down about 60 feet, at which point they have struck a promising vein of ore. This Company is composed of Copperopolis men, who have become pretty well posted in copper. Some 200 tunnels and shafts have been commenced in this district, which will be prosecuted as fast as assessments can be levied and collected to carry on the work with.

A meeting of miners of this district was recently held, at which resolutions were passed to suspend until the 18th. of April next, the rule heretofore adopted requiring two days work in each month for each 200 feet of ground, in order to hold the same.

A NEW AND NOVEL PUMP.

MR. M. DISNEY, the inventor of a new and novel Pump, has one of his machines in operation at the Golden State Foundry, on First Street, in this city, which all who are interested or curious in such matters are invited to call and examine. The principle and construction of this pump are

such as to admit of its use for a Force and Lift Pump, a Rotary Steam Engine, or a Hydraulic Water Wheel. For the latter purpose its construction appears to be most admirably suited. As a steam engine, we imagine its chief defect will be found in the difficulty with regard to its being properly "packed." We presume, however, that further study and experiment might be able to overcome that objection to a sufficient extent to render it of practical value for even that use. The chief purpose, however, for which the machine has been designed is a pump. The one now on exhibition is of two inch size. It is the intention of the invention to construct them of all sizes, from one capable of throwing 30 gallons per minute, or less, up to 5,000. It is impossible to give any idea of its mechanism without diagrams, Those who would like to know more fully of it are invited to call and examine it as above, or on Third, near Broad Street, in Oakland, where another one of the same make may also be seen in operation. The proprietor is prepared to receive orders for their construction of any size. We understand that several have already been ordered. County and State rights will be sold on reasonable terms.

ESMERALDA MINING CORRESPONDENCE.

Considerable activity has prevailed in the stock market for the past two weeks.

The Del Monte, Pond, Crockett, Western Summit, Lexington, on Last Chance Hill, are all being worked with renewed vigor. About 300 men are engaged on the five claims, working day and night shifts.

The Greenback, Utah, and Cortez, on Silver Hill, are being worked by a large force.

The Cortez Company have sunk a new shaft about 30 yards southerly from the old Indianola shaft and are taking out more silver rock than has ever been taken from the claim.

A new contract has been given on the Greenback Ledge, and the rock increases in richness as the work progresses. Messrs. Lufkin, Lake & Co. have purchased one-half of the entire mine, (400 feet) and are having the rock crushed at their mill. The Company are crushing 45 tons per week. The rock yields on an average \$61 per ton.

The Juniata Tunnel, on Martinez Hill is now in to a depth of 190 feet. The Company are sinking on the Juniata ledge in the tunnel.

The shaft is now down to a depth of about 140 feet. The ledge is over nine feet wide, and the rock increasing in richness.

The Company have about 100 tons of rock out at the mouth of the Tunnel which will be crushed during the coming month at Gregory & Beldens Mill.

The Durant Company have purchased a fine Mill which is now being built on Bodie Creek, below the Autelope and Del Monte Mill. The Machinery has nearly all arrived and the mill will be completed and ready to run by the latter part of December.

The Durant Ledge is situated on Middle Hill, west of the Strawberry Ledge. The rock is very rich, and the Company are again working the claim with a large force. They have several hundred tons of rock taken out ready for crushing, at their own mill when completed.

The Clan Alpine Company are still drifting on the claim. The rock is increasing in richness, and the ledge widening out. The upper shaft is down to a depth of 70 feet, and the ledge is four feet wide.

THE MINING SHARE MARKET.

About the usual amount of business has been transacted the past week, in the Mining Share Market. A larger number of shares than usual have been forced upon the market, which, together with the continued persistence of lenders to call in their loans has exerted an important depreciatory influence upon prices.

Ophir Shares have been unusually active at a large decline. Upwards of 1,000 shares have changed hands during the week. In the matter of its suit against the Burning Moscow, the Company not being ready for trial when the case was called, on Tuesday last, it was dismissed. The Company, however immediately filed papers for a new suit.

Gould & Curry shares, owing to a large falling off of its



dividend—from \$150 to \$100 per foot—has suddenly  
ned from \$4,500 to \$4,350. The receipts of the Com-  
for the past month have been somewhat greater than  
y previous like period, falling very little, if anything,  
t of \$400,000; but the expenditures of the Company in  
prosecution of their new improvements have been un-  
lly large, and will continue so for a month or two to  
a. These improvements will double the working capacity  
the Company's mill. The Board of Trustees have adopt-  
very commendable policy in simply dividing their sur-  
after paying all expenditures as they occur.

urning Moscow still continues the chief speculative stock  
the market, and has fluctuated from \$255 @ 355, closing  
285. There has been a slight falling off in the extent of  
actions in this stock from the two previous weeks.

adison shares have been quite active, and are the only  
we quote at an advance over last week. Their improv-  
is attributable to a consolidation with the Burning  
cow—six feet for one.

iching has been largely dealt in at large fluctuations,  
ning at \$15 they advanced to \$110 on 30 days, but finally  
ed at the original figure.

urnside, after remaining quiet for a long period, has again  
its appearance—390 shares having changed hands  
the week at from \$8 @ \$12.

ncle Sam, after selling at \$250 on 30 days, fell to \$200.  
elation to the late strike in this mine, the Territorial En-  
rise of the 22d ult. says: We mentioned yesterday that  
h strike had been made in the Uncle Sam. Further re-  
s from the mine corroborate all we have said, and make  
ertain that the late developments in that mine are of  
t and permanent value. This is a little further south  
the rich black sulphuret ores of the Comstock range  
ever yet been found. Of course the fact of ores of such  
e having been found in the Uncle Sam creates a great  
ing among those who own feet in claims adjoining and  
ward of the spot where these ores are known to exist.  
holder shares have been but little in demand, and have  
ged hands at a slight depreciation.

orth American has been in considerable demand—455  
es having changed hands at reported rates.

erman opened the week at \$650 on 30 days, but closed  
600.

erra Nevada opened at \$90, declined to \$74, but closed  
00.

verage has declared a dividend of \$50 per foot out of the  
earnings of the month. It is confidently asserted that  
claim can now be considered a permanent dividend pay-  
property.

ultic shares opened at \$57 50, rose to \$64 thirty days,  
closed at \$57 50.

ide of the West, dull at \$30.

dorado, declined to \$58.

orth Potosi is quoted at \$37, and Spanish No. 2 at the  
figure.

t. Davidson, reached \$4, and closed at \$3 50.

orton, has a good market at \$8.

ide West shares have been in considerable demand at  
quotations.

atelope, is quoted at \$175, an advance over last quota-

eba, advanced to \$160 on early sales, and closed at

setters. (See notice of this mine in another column.)

e Soto is dull at \$30.

Excelsior lead, 35 miles east of Aurora, is yielding ex-

nt ore. The Company are about to send two tons to this

for a working test. The lode is from 9 to 12 feet wide.

ys have been made at from \$800 to \$1,600 per ton. Sev-

other companies are being worked in the same district

encouraging prospects.

#### COPPER.

ipments of copper ore still continue to come forward  
the various shipping mines as usual. The ships Invin-  
and Lizzie Moses are now receiving large amounts  
is ore for Boston and New York. The former carries  
principally from the Union and Copper Hill mines, and  
utter from the Napoleon and Newton.

the Union is now shipping about 550 tons per month, of

veraging 20 per cent.

the Keystone is not forwarding any ore at present. The

inery for concentrating is still in course of completion.

the Napoleon has produced for the month of October 360

of ore, varying from 11 to 20 per cent in quality.

#### REPORT OF BIDS

At the San Francisco Mining Stock Board.

For the week ending Oct. 31, 1893.

Names of Companies.	Shares per 100	Per Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Latest Asking Price.
<b>WASHOE STOCKS.</b>									
John .....	12	5300	1575	1510	1500	1470	1420	1400	1400
Gould & Curry .....	4	500	4475	4000	4000	4000	4000	4000	4000
Savage .....	1	100	100	100	100	100	100	100	100
Chollar .....	4	500	800	875	800	875	800	800	800
Potosi .....	12	200	100	100	100	100	100	100	100
Hale & Norcross .....	2	500	800	875	800	875	800	800	800
Sierra Nevada .....	1	500	800	875	800	875	800	800	800
Excelsior .....	4	500	800	875	800	875	800	800	800
Burning Moscow .....	2	100	55	335	300	275	250	250	250
North Potosi .....	1	300	35	35	30	37	—	37 1/2	37 1/2
Meridian .....	1	100	125	—	—	—	—	40	40
Charles Caney .....	1	300	10	—	6	8	11	10 1/2	12
Sacramento .....	1	500	—	—	—	—	—	90	90
Iowa .....	1	500	—	—	—	—	—	90	90
La Crosse .....	1	500	—	—	—	—	—	90	90
Overman .....	1	500	—	—	—	—	—	90	90
Best & Belcher .....	1	500	—	—	—	—	—	90	90
Sierra Nevada .....	1	500	—	—	—	—	—	90	90
Daney .....	1	500	—	—	—	—	—	90	90
Burning Moscow .....	1	500	—	—	—	—	—	90	90
Charles Caney .....	1	500	—	—	—	—	—	90	90
Baltimore American .....	1	500	—	—	—	—	—	90	90
North American .....	1	500	—	—	—	—	—	90	90
Bullion (G. H.) .....	1	500	—	—	—	—	—	90	90
Pride of the West .....	1	500	—	—	—	—	—	90	90
Spanish No 2 .....	1	500	—	—	—	—	—	90	90
Norton .....	1	500	—	—	—	—	—	90	90
Barroside .....	1	500	—	—	—	—	—	90	90
Adriatic .....	1	500	—	—	—	—	—	90	90
Iowa .....	1	500	—	—	—	—	—	90	90
Madison .....	1	500	—	—	—	—	—	90	90
Buckeye .....	1	500	—	—	—	—	—	90	90
Lucerne .....	1	500	—	—	—	—	—	90	90
Lady Bryan .....	1	500	—	—	—	—	—	90	90
Mt. Davidson .....	1	500	—	—	—	—	—	90	90
Cedar Hill Tunnel .....	1	500	—	—	—	—	—	90	90
North Ophir .....	1	500	—	—	—	—	—	90	90
Wide West .....	1	500	—	—	—	—	—	90	90
Real Del Monte .....	1	500	—	—	—	—	—	90	90
Utah .....	1	500	—	—	—	—	—	90	90
Pond .....	1	500	—	—	—	—	—	90	90
Grass Valley .....	1	500	—	—	—	—	—	90	90
Michigan G. H. .....	1	500	—	—	—	—	—	90	90
Ural .....	1	500	—	—	—	—	—	90	90
Bodie No 2 .....	1	500	—	—	—	—	—	90	90
Blue Ledge .....	1	500	—	—	—	—	—	90	90
Napoleon, Copper .....	1	500	—	—	—	—	—	90	90
Oncida .....	1	500	—	—	—	—	—	90	90
St. George .....	1	500	—	—	—	—	—	90	90
Sacramento .....	1	500	—	—	—	—	—	90	90
Governor Nye .....	1	500	—	—	—	—	—	90	90
Table Mountain Cop. .....	1	500	—	—	—	—	—	90	90
Diamond, R. R. .....	1	500	—	—	—	—	—	90	90
Josephine, Copper .....	1	500	—	—	—	—	—	90	90
Melones .....	1	500	—	—	—	—	—	90	90
La Crosse .....	1	500	—	—	—	—	—	90	90
Harrison, Vir. Dis. .....	1	500	—	—	—	—	—	90	90

Overman .....	5	625	“	“
Best & Belcher .....	“	“	“	“
Sierra Nevada .....	65	74 @ 90	“	“
Daney .....	110	90	“	“
Burning Moscow .....	745	255 @ 355	“	“
Charles Caney .....	“	“	“	“
Baltimore American .....	“	“	“	“
North American .....	455	62 @ 97	“	“
Bullion (G. H.) .....	“	“	“	“
Pride of the West .....	20	35	“	“
Spanish No 2 .....	10	32	“	“
Norton .....	266	7 @ 8	“	“
Barroside .....	390	8 @ 12	“	“
Adriatic .....	60	4	“	“
Iowa .....	“	“	“	“
Madison .....	375	30 @ 50	“	“
Buckeye .....	5	13	“	“
Lucerne .....	“	“	“	“
Lady Bryan .....	“	“	“	“
Mt. Davidson .....	215	3 1/2 @ 4	“	“
Cedar Hill Tunnel .....	“	“	“	“
North Ophir .....	“	“	“	“
Wide West .....	149	80 @ 87 1/2	“	“
Real Del Monte .....	“	“	“	“
Utah .....	“	“	“	“
Pond .....	“	“	“	“
Grass Valley .....	“	“	“	“
Michigan G. H. .....	423	45 @ 110	“	“
Ural .....	“	“	“	“
Bodie No 2 .....	“	“	“	“
Blue Ledge .....	“	“	“	“
Napoleon, Copper .....	5	90	“	“
Oncida .....	5	20	“	“
St. George .....	“	“	“	“
Sacramento .....	“	“	“	“
Governor Nye .....	“	“	“	“
Table Mountain Cop. .....	“	“	“	“
Diamond, R. R. .....	“	“	“	“
Josephine, Copper .....	“	“	“	“
Melones .....	15	80 @ 85	“	“
La Crosse .....	25	35 @ 45	“	“
Harrison, Vir. Dis. .....	“	“	“	“

#### VIRGINIA CITY STOCK LIST.

Corrected for the Mining and Scientific Press, Thursday, Oct. 28, 1893.

Bid	Ask'd	Bid	Ask'd
<b>Virginia Mining District.</b>		<b>Union</b>	300
Ashland .....	9 8	U. S. Tunnel (1/2 interest)	700
Allen .....	30 42	Utah .....	70 100
Atchison .....	“	United States .....	“
Alturas .....	3 6	W. Scott .....	10
Belvedere .....	8 10	Washington .....	“
Birdsall .....	12 25	York .....	3 5
Bajazet and Golden Era .....	24 50	Zouave .....	12 20
Barroside .....	12 20		
Burning Moscow .....	35 40	<b>Gold Hill District.</b>	1500
Beach-Paxton .....	75 175	Alpha .....	“
Bloomington .....	2 3	Aster .....	25
Cassia (Buchanan) .....	“	Baltic .....	57 65
Cedar Hill Tunnel .....	8	Ballou .....	52 57
Cole .....	8 14	Belcher .....	1150 1300
Commercial .....	15 20	Branch Mint .....	15 15
Consolidated Cedar Hill .....	2	Calcutta tunnel .....	37 1/2 45
Durham .....	9	Coppers .....	5
Empire .....	12	Combined effort .....	39
El Dorado .....	60 65	Dall .....	40 65
Fairview .....	200 225	Dardanelle .....	15
Grass Valley .....	40 75	Eureka .....	15 20
Hazel Green .....	“	Forrest & Ricard .....	6 10
Harrison, Virginia Incorpor .....	55 62	Fair View .....	250
Harrison, San. Fran. Incor. .....	“	Gold Hill, Big Lodge .....	75 85
Henderson .....	25	Golden Eagle .....	5 10
Honduras .....	20	Golden Eagle (No. 1) .....	5 10
Indiana .....	5	Hawkeye .....	60
Indus .....	5	Hudson .....	200 250
Irvine .....	16	Hornet .....	75
Insurance .....	16	Independent No 2 .....	15
Iron .....	250	Jacket .....	37 25
Ironside .....	5 6	Koh-i-noor .....	“
Indus .....	5	Leon .....	12
Junata .....	5 10	Laboring .....	3 7
Keystone .....	25 25	Lucerne .....	27
Kenosha .....	15 15	Louis Anna .....	15
La Crosse .....	50 50	Lafayette .....	7 17
Lane .....	7	La Motte .....	12
Monte Cristo .....	6 11	Mary Anna .....	112 125
Meredith .....	“	Michigan .....	95 125
Mt. Davidson .....	5	Mason .....	2
Massillon .....	10 12	North American .....	65 87 1/2
McBee .....	25	North Ophir .....	10
Milton .....	43 70	Overman .....	560 0000
Monarch .....	12	Oriental .....	“
Madison .....	30	Omaha .....	220 500
Mohegan .....	15	Princess .....	100
Moray .....	15	Sinton .....	5
McClellan .....	175	Swezey .....	100
Moss .....	12	Stephenson-Kelso .....	18 22 1/2
Norton .....	2 20	South Michigan .....	4
Oakland .....	10	Sunrise .....	10
Ore .....	3 1/2	Union .....	10
Oregon .....	8 15	Uncle Sam .....	200 265
Old Virginia .....	“	White House .....	15
Phoenix .....	20	Vesuvius .....	60
Pride of Washoe .....	15	Yellow Jacket .....	1000 1500
Peytona .....	15 25	Yolo .....	8
Poorman .....	150 160		
Perseus .....	12	<b>Devil's Gate District.</b>	75 85
Poore de Leon .....	1 4	Governor Nye .....	8 15
Reed .....	“	Hawley .....	20 40
Reorder .....	8 10	Monterey .....	7
Santa Rita .....	15 50	Pride of the West .....	45
Santa Fe .....	35 40	Pioneer .....	5
Sato .....	3 6	Park .....	20
St. George .....	10	Wanawana .....	6
Sierra Nevada .....	95 120	Wide West .....	“
Sacramento .....	“		
Shamrock .....	15	<b>Flowery District.</b>	“
Sister .....	17	Atwill .....	“
Silver .....	450 700	Adriatic .....	3 4
St. Helena .....	15	Lady Bryan .....	5 6
St. Helena .....	40	Harrison .....	5 6
Sierra Nevada .....	55	Uncle Sam .....	5
Texas .....	5		

#### SALES FOR THE WEEK ENDING OCT. 24, 1893.

Uphir.....	1029	Shares	\$1430 @ \$1700	per foot
Falls of Clyde.....	50	"	3 1/2	" "
Great Western Tun.....	—	"		" "
Josephine.....	—	"		" "
Oso.....	—	"		" "
Gould & Curry....	44	"	4350 @ 4600	" "
Savage.....	—	"		" "
Chollar.....	28	"	900	" "
Laurel Hill.....	5	"	6	" "
Willow Consol'.....	—	"		" "
Branch Mint,....	—	"		" "
Die Vernon.....	5	"	7	" "
United Cosmopol'.....	—	"		" "
Union, G. H.,.....	50	"	10 @ 11	" "
Union, R. D.,.....	739	"	6 @ 7	" "
Rhode's Diggins,.....	—	"		" "
Hale & Norcross.....	—	"		" "
Uncle Sam.....	102	"	200 @ 260	" "
Echo.....	—	"		" "
Baltic.....	97	"	57 1/2 @ 64	" "
El Dorado.....	81	"	62 1/2 @ 68	" "
North Potosi.....	5	"	37	" "
Caledonia Tun. Co..	86	"	40	" "
Potosi.....	2	"	1450	" "
Yellow Jacket.....	—	"		" "
Imperial.....	10	"	360 @ 410	" "
Silver Hill.....	—	"		" "
Bodie Bluff.....	—	"		" "
Willow Springs.....	—	"		" "
Sheba.....	138	"	125 @ 160	" "
De Soto.....	15	"	30 @ 32	" "
Monte Cristo.....	—	"		" "



## [ADVERTISEMENT.]

## THE WIDE WEST MINE.

Extract from a private letter dated Esmeralda, October 23, 1863.

DEAR FRIEND: I take pleasure in giving you some items about the famous WIDE WEST MINE. By favor of the Superintendent, I have been permitted to go through the works, and I have carefully examined the condition of the mine, which I find as favorable as could be wished. The recent progress of the work reflects the highest credit on the intelligent arrangement of the Trustees and the good and efficient direction of the Superintendent and Engineer. A tunnel has been opened from the mine to the mill, for the transportation of the ore. I look upon this as one of the best mines yet opened in the Territory. The new double ledge is not opened yet, but soon will be, as every previous preparation is now about completed. I think the shareholders will soon hear of important developments and splendid results, which will greatly enhance the price of the stock. I believe the time is near when a thousand dollars per foot will be considered cheap for it. In the meantime capitalists will undoubtedly endeavor to further "bear" the stock; they will tell you there is no water to work the mine and, perhaps, that the mine has given out, but my advice is for you to hold on to your stock. Believe me when I tell you that I think it will be worth \$1,000 per share within four months. Keep it, pay your assessments, and wait with patience for the rainy season.

I am doing, so far, very well myself. I get many orders, have plenty to do, and make more money than I did in San Francisco. I would be glad to see you come over in the spring and spend a few days with me—I could post you about many things which would be useful to you. It is surprising to see the miners getting along so well. My best regards to my friends, especially to George. Tell him I have seen Caroline Meyer. She is earning \$50 per month.

I will write you often, and beg you to let me hear from you as soon as possible.

Yours,

MINING AGENCY.—By reference to our advertising columns it will be seen, that we have made arrangements to obtain special information, through a resident correspondent, with regard to any particular mine at Reese River. Parties in the city about to invest in "feet" in that neighborhood, and not having time or caring to incur the expense of visiting the locality, will do well to avail themselves of the opportunity hereby presented of securing reliable information, previous to investment, at a moderate cost.

Persons already holding "feet" and desirous to learn through a disinterested source the actual condition of the mine in which they may be interested, will do well to embrace the opportunity here presented of securing the desired information.

We shall establish agencies similar to the above in all the principal mining districts, at an early day.

## Owens River Canal Company.

## FOR SALE,

FOR ACCOUNT OF THE COMPANY, 7,000 SHARES OF the above stock, at \$1 per share. It is confidently presented to the public as the best investment, for the price now offered in this market.

Office of the Company No. 328 Montgomery street.

## New Patent Agency.

WE HAVE CONNECTED WITH THE Publication of the "MINING AND SCIENTIFIC PRESS"

The Patent Agency Business, And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

Mining and Scientific Press Agency The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

## FOREIGN PATENTS OBTAINED

By application at this office, Room 57 Government House. EWER & SMITH, Solicitors.

## NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

## PATENT RIGHTS.

Patent Rights Bought and Sold, At the office of the "Mining and Scientific Press" Agency EWER & SMITH.

## IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their inventions illustrated and described in the columns of this paper. Free of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

## GENERAL NOTICES.



DR. H. AUSTIN,  
DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

## DESKS

AND

Office Furniture,  
OF ALL KINDS..... FOR SALE BY

JOHN WIGMORE,

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBING, of all Kinds, attended to.

## SQUARZA'S PUNCH.

## FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

## ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

## FREDERICK MANSELL,

MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorff

Drawings of Models made for parties applying for patents at Washington or London. mar23 2m

El Paso District, Los Angeles County,

## MINING AGENCY.

C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

LETTERS OF ENQUIRY, containing Revenue or Postage stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to. The subscriber has a carefully prepared map, (and specimens) of each lode in the district, a portion of many of which are for sale at very low figures. For further particulars he would refer to J. Burnett, Esq., 425 Davis St., San Francisco Cal.

El Paso, June 21, 1863. C. W. TAPPAN. au31

## R. W. MYERS, &amp; CO.,

Chases' New Mill, Fremont St., near Market,

JOB TURNING & SCROLL SAWING.

## BRACKETS,

RED WOOD BALUSTERS,

NEWEL AND CEDAR BALUSTERS

for Stairs.

Manufacturers of every description of Oval, Circular and Square

PICTURE & LOOKING GLASS FRAMES

For the Trade at New York Prices.

## All kinds of Designs for Building.

R. W. MYERS.

H. C. SMITH

## MINING LAWS AND FORMS

JUST PUBLISHED BY H. H. BANCROFT & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. sep14

## H. C. KIBBE,

MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARNOLD HALL.)

## GENERAL NOTICES.

## HAYNES &amp; LAWTON,

IMPORTERS AND DEALERS IN

## CROCKERY,

GLASS WARE,

## FRENCH CHINA,

Coal Oil Lamps, Table Cutlery

CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCHANT.]

SAN FRANCISCO.

## WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. 7016-1f ZENAS WHEELER.

## Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

## REMOVAL.

OFFICE OF THE PACIFIC METALurgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased. COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent, 509 Sacramento street, near Sansome.

## NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Webb,

SAN FRANCISCO.

GEO. A. MITCHELL.

D. S. HUTCHINSON.

## METAL F &amp; HUTCHINSON'S

PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

## CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

\$3. Per Dozen!

Large sized Photographs \$3—Extra copies \$1 each. AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

## HOTELS.

## International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

FIRE-PROOF BRICK BUILDING.

Most convenient to the Steamer's Landing, Business sits & Places of Amusement

OPEN ALL NIGHT.

City Railroad Cars Pass the Door. REDUCTION IN PRICES.

Fine Bathing Rooms attached to the Barber Shop. Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent Spring Bed and Hair mattresses. The International offers to guests the greatest number and

BEST FURNISHED FAMILY ROOMS; and SETS AS GOOD A TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects prior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

## Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CALIF.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. I only half a block from the Post Office and Custom House and about the same distance from the principal place of Amusement

The City Railroad Cars pass the Door

The House is conducted on Temperance Principles

WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate by the day, meal or week. WE SOLICIT A CALL FROM F. E. WEYGANT, Proprietor

For the accommodation of my many guests I have been and reformed the INTERNATIONAL HOTEL, and carry on the two houses in connection, so that those wishing to put up at either house, may take the Tremont or International Hotel Cars and be taken to either House with their baggage, FREE.

F. E. WEYGANT

## THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Streets, SAN FRANCISCO.

STEPHEN SMITH..... PROPRIETOR

The above House is a Fire-proof building, with Grout Front, and kept on the European Plan, with board lodging by Day or Week to suit the convenience of Patrons.

The Rooms are handsomely furnished with Patent Spring Beds, and Hair Mattresses affording very superior accommodations for family single persons.

The Table is supplied with the best marketable at prices to suit the times.

The Railroad House Coach is always in attendance the Steamers to convey passengers and their baggage. The House Free of Charge.

The House is open all night.

## P. M. S. C. O.

PACIFIC MAIL STEAMSHIP COMPANY line to PANAMA, connecting via the Panama road with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

## FOR PANAMA.

The following Steamships will be dispatched month of November, 1863.

Nov. 3d, - - - Steamer Golden

Nov. 13th - - - Steamer St. Louis

Nov. 23d - - - Steamer Orion

Will leave Folsom Street Wharf, with Passenger Treasures, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY. And connect via Panama Railroad, at Aspinwall, tranships for New York.

For Freight or passage, apply to

A. B. FOSBES, Agent

at Corner of Sacramento and Leidsdorff



FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

**REYNOLDS'**  
Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

127 of these Invaluable Machines,  
ARE NOW IN USE  
in California and Nevada Territory, giving a perfectly  
regular motion and  
Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor**  
is the CHEAPEST, SIMPLEST and QUICKEST to act  
and least liable to get out of order of any Governor in  
use. It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.

**Clark's Steam and Fire Regulator,**  
for controlling the Draft or Blast by opening the Chimney  
or Valve in the Blast Pipe by the pressure of the  
steam in the boiler. It will regulate the pressure to a  
pound, on the square inch. It CANNOT get out of order  
and any person can put one up in an hour after the damper  
is put in.

**Ingersoll's Patent Drill Press,**  
with which drilling can be done the same as with the  
common reamer, and when small holes are wanted, it  
can be done four times as fast. The handle can be worked  
in any direction.

**Felt for Steam Boilers, Pipes, Etc.,**  
at the lowest market rates.

**Steam Engines, Boilers, Pipes,**  
Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.

**Anti Incrustation Powder,**  
Sole Remedy for Scale in Steam Boilers, without injur-  
ing the iron. In use for the past thirty years.  
Refer to—Sagor & Son, San Francisco,  
Cutler & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.  
**E. T. STEEN AGENT.**  
No. 33 Fremont Street, San Francisco.

**MOYNIHAN & AITKEN,**  
**Boiler Makers and Blacksmiths,**  
Mission, between Beal & Fremont Sts,  
San Francisco.

**N. B.** All kinds of Boiler and Sheet Iron Work exe-  
cuted at the shortest notice, and on the most reasonable  
terms. Jy 29

**PUMPS!**

**HARRISON'S**  
**California Lift and Force Pump,**  
WITHOUT VALVES OR PACKING,  
Suitable for Mines, Fire Engines, Wrecking or Irrigat-  
ing. This is the Cheapest, Lightest and most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

**ALL SIZES;**  
capable of throwing from ONE HUNDRED to FIVE  
THOUSAND Gallons per Minute—For sale by

**C. H. HARRISON,**  
**PHOENIX OIL WORKS,**  
No. 16 617 Front Street, San Francisco.

**50 lbs. MARINE and**  
**Fire-Proof Paint,**

**MANUFACTURED BY THE PACIFIC METALLURGICAL**  
Works in this city, for Hulls and Decks of Vessels  
on ground. Mineral Rock contains Arsenic, Copper, Li-  
tharge and six other Minerals. When used on the Deck  
Bottoms of Ships, it is equal to a coat of Stone, and  
its equal to Copper, no worms will ever effect it, and  
easier than any other paint.

**DIRECTIONS:**  
For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur,  
one part Mineral Paint, mix with Coal Tar and apply  
hot.  
For sale by all Ship Chandlers and Tradesmen, in boxes  
50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**  
When used on Roofs, Buildings, or Fences, it is equal  
covering them with a coat of Stone, being perfectly  
Fire Proof, and costing less than any paint.

**DIRECTIONS:**  
HOUSE—Mix three parts Mineral Paint with one part  
white lead, thin with Linseed oil; if a lighter color is  
wanted, mix less paint, more lead.  
ROOF—Five parts of Mineral Paint, one part white  
lead, mix with Linseed oil. Put it thick on a tin Roof  
one coat when properly applied will last three years.  
S. C. BRADSHAW, Agt.,  
J. T. TORQUE, Superintendent.  
**WORKS, North Beach; Office, 509 Sacra-**  
**mento st., San Francisco.**

**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:  
**GENUINE WHITE IRON SHOES AND DIES.**  
**PALMER, HANSCOM & CO.**

**To Quartz Miners.**  
**Knox's Improved**  
**AMALGAMATING PAN,**  
WITH  
**PALMER'S PATENT STEAM CHEST.**

**THE ABOVE COMBINATION SECURES THE MOST**  
complete amalgamation of the precious metals of  
any process now known.  
By its steam is introduced in the most effective and eco-  
nomical manner, while it is peculiarly adapted to the  
catching of floating gold and silver, known to be other-  
wise lost. Made exclusively by  
**PALMER, HANSCOM & CO.,**  
**GOLDEN STATE IRON WORKS,**  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chests, False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent.  
**W. A. PALMER.**

**JOHN P. GALLAGHER.....JOSEPH H. WEED.**  
**GALLAGHER & WEED,**  
**BRASS & BELL FOUNDRY**  
**AND**  
**LOCK FACTORY.**

No. 125 First Street, opposite Minna, next door to Pacific  
Foundry, all kinds of  
**Brass and Composition Castings and**  
**Finishing, done with neatness and**  
**dispatch.**

**CHURCH AND STEAMBOAT BELLS, OF ALL SIZES**  
Made to order. Engines & Gongs made and hung in  
the best manner. Bank, Vault, Store and Prison  
Locks, also brass Padlocks and Shop Locks of various  
patterns, on hand and made to order.  
Particular attention given to casting Rudder Braces  
and Ship Work in general.  
All Jobs promptly attended to.—Prices  
moderate.  
Removed from Oregon street, between Front and Davis.

**Miners' Foundry**  
—AND—  
**MACHINE WORKS,**  
First St., between Howard & Folsom,  
SAN FRANCISCO.

**EVERY DESCRIPTION OF IRON AND BRASS MACHIN-**  
ery, the Best and Most Economical, manufactured  
in the state of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:  
Steam Engines and Boilers, Flour, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgama-  
tors and Water Wheels—some in operation and on exhibi-  
tion.

\* \* Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.  
All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere  
**HOWLAND, ANGEL & KING**  
San Francisco, February 23, 1868.

**San Francisco Machine**  
....AND....

**IRON WORKS!**  
Northeast corner Fremont and Mission Streets.

**ALL KINDS OF MACHINERY MADE TO ORDER ON**  
most reasonable terms.  
Steam Engines, High and Low Pressure; Quartz  
mills, Saw mills, Mining Pumps, Hoisting machines for  
mining purposes, Wine Presses, Agricultural implements  
etc, etc, and Castings of all descriptions made to order.  
Steam Engines exchanged and for sale by  
**DEVORE, DINSMORE & CO.**  
REPAIRING promptly attended to.  
**FOR SALE.**  
San Francisco, July, 1868. Jy 13

**VULCAN IRON WORKS COMPANY**  
**P. Torquet, Manager,**

**STEAM ENGINE BUILDERS**  
and

**BOILER MAKERS,**  
**Iron Founders and General Engineers,**

No 137 & 139 First street, San Francisco.  
Pumping, Hoisting, Mining and quartz-crushing  
Machinery.  
Shoes and Dies of the hardest Iron,  
Russia Iron Punched Screens.  
Steamboat Machinery: Saw, Flour and Sugar Mills.  
High and Low Pressure Boilers of all Styles.  
Jenny and other Turbine Water Wheels with latest  
improvements.

**W. T. & J. GARRATT,**  
**City Brass and Bell Founders**  
Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE**  
and Lift Pumps, Church and Steamboat Bells, Tay-  
ern and Hand Bells and Gongs, Hose and all other joints,  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PIPES and NOZZLES for MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.;  
COUPLING JOINTS of all sizes. Manufacturers of "Gar-  
ratt's Patent Improved Journal Metal."

**D. MORRIS,**  
**MACHINE SHOP,**  
227 Market, corner of Beale Street.

Manufacturer of  
**WARRANTED FIRE-PROOF SAFES**  
Mill Work, of all kinds made to order. All kinds of  
Repairing done at moderate prices. Jy 13

**LEWIS COFFEY AND RISDON,**  
**STEAM BOILER AND SHEET IRON**  
**WORKS.**

The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.  
Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.  
**LEWIS COFFEY** J. N. RISDON.

**THEODOR KALLENBERG**  
**Maker of Models**  
**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosoph-**  
ical Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and the Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to.  
No. 418 Market street, San Francisco.  
d7.30a

**HIRAM WRIGHT,**  
**PICK MAKER,**

Has established a Manufactory for the Making of  
**MINER'S PICKS,**  
at  
NO 121 BUSH STREET, SAN FRANCISCO,  
[Between Sansome and Battery.]

WHERE can be had a Superior Pick for Miners use  
As he manufactures all his picks under his own personal  
supervision, he warrants them as being made of the  
best material and by the best workmanship.  
Orders attended to and filled promptly and with dis-  
patch. aug 17

**WRIGHT'S PICKS.**

**JOHN WRIGHT,** of Sacramento, has established him-  
self in San Francisco, for the manufacture of every  
description of PICKS, of the best material, at reduced  
prices. Pick Boys of the best iron furnished in any quan-  
tity, at low rates. Orders from the country promptly  
attended to. N. B.—None genuine unless stamped with  
my name.  
**JOHN WRIGHT, 611 Market street,**  
Opposite Battery, San Francisco.

**CALIFORNIA TOOL WORKS!**

**John Weichhart,**  
Manufacturer of  
**All Kinds of Edge Tools, Etc.,**  
Plane Irons Moulding Irons,  
Stone Cutter's Tools, etc  
No. 22 Fremont street, bet Market and Misso  
San Francisco, July 14, 1868.

**PATENT CLAIMS.**—We will furnish, on application, the  
claim of any invention that has been patented within the  
last fourteen years. The name of the patentee—date  
of patent, when known, and two dollars for copying  
should be sent.

**MODELS.**—Inventors will please attach to all model  
sent to us, their names and address, in a legible, per-  
manent form, this will avoid confusion and prevent  
errors.

**DRAWINGS.**—We have highly talented and efficient  
Draughtsmen, by whom drawings of every description  
are executed in the best style of art, with promptitude,  
and at a moderate cost.

**WANTED**  
By a competent person, the Secretaryship of four  
Mining Companies. Books to be kept at the Office of the  
Mining and Scientific Press, No 57 Government House.  
Inquire as above. oct 5

**SOUTH PARK**  
**Quartz Mill and Reduction Works,**

**GOLD AND SILVER ORES WORKED AT REASON-**  
able rates, and Working Assays made of small  
lots. All kinds of ores crushed at short notice.  
**J. H. SMITH & CO.,**  
Office in Shiel's Block, opposite Masonic Temple,  
Jy 13 **S. F. CLOUSER, Secretary.**

**W. W. HANSCOM,**  
**Steam and Mechanical Engineer,**  
Designs furnished, and Drawings made for  
Engines, Mills, Water Wheels, Mining Ma-  
chinery, etc., etc.,  
At Golden State Iron Works,  
aug x First Street, San Francisco.

**Eye, Ear and Throat.**  
**DR. DE CASTRO,**  
**Oculist and Aurist,**

**WHO HAS PRACTISED IN NEW**  
York and all the principal cities of Europe with  
such unrivalled success, and from each place is in pos-  
session of the most eminent testimonials, may now be con-  
sulted upon diseases of these delicate organs, with a view  
to the permanent cure. The tympaanum was instantly  
cured. The Doctor employs his (by the Medical  
Society of London approved)

**Self-adjusting Artificial Tympanum,**  
For the relief of deafness, attended by loss or injury of  
the membrane tympani, and for the cure of discharge  
from the ear—the invention of Dr. Castro, M. D., author  
of "Deafness Practically Illustrated as to its Nature and  
Treatment," etc.

The self-adjusting Artificial Tympanum was first intro-  
duced to the notice of the profession at the meeting of the  
Medical Society of London, on the 20th of November,  
1863. An animated discussion ensued on the reading of  
the paper, and several members of the Society bore testi-  
mony to the success of the remedy and the importance of  
the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-  
Adjusting Artificial Tympanum, as he had observed the  
immense benefit a young lady friend of his had received  
from it. She was in fact, quite deaf, and in a most mis-  
erable state; the effect of the tympanum was instantane-  
ous—quite like a miracle. Five more testimonials from  
Members of the Medical College, New York, and the prin-  
cipal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and  
Kearny streets. Entrance on Market street.

**Mr. Editor—Having been afflicted**  
with deafness for the last two years, originating from a  
severe cold, and for the last month suffering from the  
most excruciating pains in my ear, I was obliged to come  
down to San Francisco to seek relief. After a physician's  
recommendation to wait on Dr. De Castro, on the corner of  
Kearny and Market streets, and underwent one operation,  
and it is with the utmost pleasure I can say my hearing  
was suddenly and without pain entirely restored. I deem  
it my duty to make this known to the public, and to recom-  
mend Dr. De Castro's skill as an aurist.  
**JOHN REESE, Napa Valley.**  
James Callaghan, witness.  
San Francisco, July 30th, 1863.

[From the Daily Alta.]  
San Francisco, June 30th., 1863.

**ED'S DAILY ALTA:**  
Permit me through your widely circulated journal, to  
say, that my daughter Mary Ellen, has been afflicted with  
deafness since she was thirteen months old, and that she  
has been a member of the Deaf and Dumb Institute since  
it was organized. On taking her to Dr. De Castro, on the  
corner of Kearny and Market Streets, and undergoing un-  
der his direction, two operations, she has heard sounds  
very distinctly; and is now, I am happy to state in a fair  
way to get permanent relief. The result, thus far, is sat-  
isfactory; and I deem this notice due to Dr. De Castro for  
his skill; and would recommend all parties similarly af-  
flicted to give him a trial. My daughter has at different  
times been under the care of the most skillful physicians  
and aurists in California, but up to the period of visiting  
Dr. De Castro, received no benefit.  
**CHAS JOHN P. WRIGHT,**  
812 Green Street.







# Mining and Scientific Press.

W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VII. SAN FRANCISCO, MONDAY EVENING, NOVEMBER 9. 1863.

NO. 2.

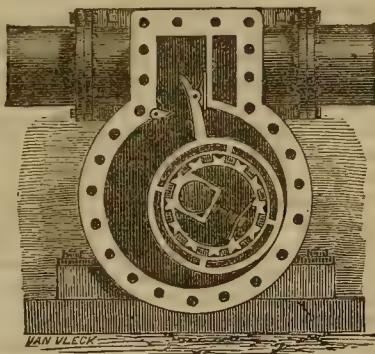
## AN IMPROVED PUMP.

The pump which we have here illustrated is the invention of Capt. C. H. Harrison, the old Mare Island Pilot, of this city, and is designed to throw large quantities of water, either as a wrecking or mining pump, or for purposes of irrigation. Its principal advantages are that it is light, compact, very durable, and not at all liable to choke or get out of order from any cause. It is self lubricating, and has neither valves nor packing, and operates either as a suction or force pump. It can be run fast or slow, according to the necessities of the case, and the quantity of water discharged is in proportion to its speed. When operating as a mere suction pump, it throws a continuous stream, and is not intermittent, like the common lift pump. It is manufactured of all sizes, from a capacity of throwing 100 to 5,000 gallons per minute.

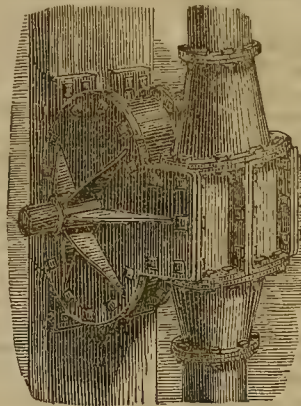
In the absence of letters upon the above illustrations, it would be quite impossible for us to give anything like an intelligible description of this most valuable invention. Parties desirous of acquainting themselves with the peculiarities and principle of working of this pump, can do so by calling at the place of business of the inventor, at the Phoenix Oil Works, 517 Front street, in this city.

The engraving upon the left represents the working arrangements of the pump, which, as will be perceived, consists of a smaller cylinder working upon an eccentric shaft within a larger stationary one. The motion of the inner cylinder is a rolling and not a *sliding* motion, as is the case with nearly or quite all other pumps in use. It is, in fact, the motion of an eccentric strap; hence the less liability of this than almost any other pump to wear by friction of gravel, when employed for mining and similar purposes. So nicely are all the parts of this pump adjusted, even in those of the lowest calibre, that it might be most effectually used for an *air pump*! The engraving on the right represents the pump as closed up and ready for work.

It is a matter of no little surprise, even to the careful observer, that when such vast improvements have been made and come into general acceptance, in almost every other department of the machinery of mining, the *pump* alone, that most essential appendage of almost every important mine, should remain, down to the present day, almost identical in its construction and mode of application to that employed in the earliest infancy of the steam engine, even when no contrivance had been applied to that machine other than a leverage or balance weight to produce the return stroke of the piston. It is true that numerous appliances have been devised for improving pumps, but none which gave promise of a successful application, on a large scale, for raising water from a great depth; hence we still find the ancient Cornish lift pump at work in mines all over the world.



HARRISON'S ECCENTRIC PUMP.



Ining capacity of the Harrison Pump, we have here just the improvement needed in this particular department of mining machinery. In addition to the qualities enumerated at the outset of this article, we have also a most economical application of power, and an ease and smoothness of working which can never be reached by the most carefully constructed lift pump. There is no jar, not the least irregularity of motion. The inevitable "thug" with which every upward stroke of the lift pump is attended, straining and jarring the machinery in a most damaging manner, is entirely avoided in this pump. The great economy in the reduction of space necessary for its operation, is also quite an important item in many cases.

This pump is not without practice, and we are not obliged to speak of it as a mere experimental machine. One may be seen in operation at the Centerville Salt works, in Alameda county, which has been in constant operation for nearly 12 months as a suction pump, throwing 600 gallons per minute, running at a very slow motion. There is another at work in a mine in Mexico, raising a column of water 200 feet. Another was recently employed in pumping coal and grit from a stranded ship in Bellingham Bay, for three months. The same identical pump, without any repairs whatever, was taken to the late Fair at Sacramento, when it worked quite as well as though it had never been used before. Thousands who saw its performance at that city can unite with us in the fullest testimonial as to its capacity and effectiveness.

A small size 2-inch pump was recently employed for about two months in a gravel pit, at the North Beach Woolen Mills, in this city, with scarcely the least perceptible wear, although constantly discharging sand and gravel, during the entire period, until the work in hand had been completed.

Many of the residents of this city will recollect the employment of one of these pumps (a 4-inch one) some six or eight months since in pumping out the wheat-loaded ship Shawmut, which had knocked a hole in her bottom on one mile rock. The bags of wheat had burst, so that the water was running through the ship.

with the water. The grain proved no impediment whatever to the most perfect working of the pump, although it would have at once choked up and rendered entirely unserviceable any lift pump.

In conclusion we would earnestly call the attention of miners and others to this new pump, which, we can but believe, would prove far more effectual and economical than any other in use for either heavy or light work. Persons desirous of satisfying themselves with regard to the capacity and effectiveness of this pump, will receive every facility for so doing by calling upon Capt. Harrison, the inventor, at 517 Front street, in this city. Capt. H. keeps in constant readiness, as above, a large wrecking pump, capable of discharging from a ship's hold at the rate of 5,000 gallons per minute. He has also a

portable engine fully capable of driving it, both of which can be put in readiness for working and transported to any part of the city or Bay at the shortest notice. He has also smaller pumps for the same purposes.

## THE VIRGINIA SALT SPRING ONCE MORE.

EDITOR MINING PRESS:—In your last issue you expressed considerable surprise that no measures had been taken to turn to profitable account the recent Salt Spring discovery, a short distance north of Virginia City, and intimated that it might be possible the proprietors were not aware of the "value of the prize they had found." Being myself the discoverer of the spring alluded to, and still owning a controlling interest in the same, I would take this opportunity to say that the "proprietors" are fully aware that they have made a valuable discovery, and are anxious to turn the same to "profitable account." Unfortunately, however, we are like most other California prospectors, not blessed with the means to go on and develop the discovery by the erection of suitable works for evaporation, or to provide the transportation required to deliver our salt at even its nearest market. If some of your numerous readers, or some others of the enterprising capitalists of San Francisco, or elsewhere, are disposed to take hold of the enterprise, they will meet with favorable propositions by calling at the New England Hotel, on Sansome street. We are perfectly aware that we have made a discovery quite sufficient to make not only ourselves rich, but any two or three others who may be willing to furnish the necessary capital to start the enterprise.

If, as you intimate, a deposit of mineral salt could be developed, at a small expense, the enterprise would prove still more valuable, in fact, of almost incalculable value; for even if a process of evaporation should be required, the facilities for transportation are so much more favorable than from any other salt locality, that we could lay down the article at Virginia City at just about half the cost at which it can be furnished from any other point.

Please excuse the liberty I have taken in thus addressing you, for publication. Knowing the interest which you take in all matters pertaining to the developments of the mineral resources of the Pacific Coast, I have taken the liberty to ask the publication of this in your valuable journal. My name and address is herewith enclosed. Yours, truly,  
Francisco, Oct. 30th, 1863.  
PROPRIETOR.



### FROM OUR CORRESPONDENT COPPEROPOLIS.

Mr. Editor:—I have just returned from an inspection of the mines of Gopher district which I found more numerous and more important than I expected. Some time ago I received bearing on the mines west of Copperopolis were valuable and the authority of this opinion being considerably relative I could not go down to Gopher district to a certain extent under my impression. Therefore, it is said, will differ—where, I presume have the same privilege; at least I know nothing of the law against our doing so. When, therefore, I say the opinion referred to could only emanate from ignorance or prejudice perhaps both, I say what observation justifies, and every candid man must admit.

Gopher district lies from Copperopolis eight miles on the main branch road, following the plateau, the first place you come to thence on entering the Gopher region. Arriving at Telegraph City the "stage stop for dinner." I do not mean the vehicle takes refreshment, but use the expression as it is generally used in a national, without considering myself responsible for its origin. At Telegraph City then I desire those who have known me thus far in my description of the mines to stop for a short time and accompany me first to the

#### NAPOLÉON.

A short walk say a mile in a southeasterly direction, brings us to the celebrated institution. Everybody, of course, has heard of the Napoleon. It ought now to be called *Napoleon-appeal*, for as it stands developed at this moment the lead in extent and character stands second only to the Union and Keystone—they are marvellous—the Napoleon, magnificent. After taking a phase of notice all will be disappointed superabundant—that is if you use the article—a short time will suffice to inspect the outside works—washing and sorting ore, the engine house, and so forth, all of which so far as they are complete. You then descend below 210 feet to see the "cave" first taking off your coat or boots as the case may require. The descent is by ladder, and if competent, or touched in the wind I assure you it is excellent exercise. The lead as it now presents itself is really magnificent. Depth—for copper eventually cuts out every other mineral—has cleared it of the corruption it carried at first for some distance down leaving the lead now 18 feet wide and pure as a bell. To prove the value of the mine, it is enough to say it has yielded nearly 400 tons of ore this month, 150 tons of which were No. 1; next month it will fully reach, if not exceed 400 tons. Let us take 400 however as its capacity and calculate its value. Making a liberal allowance for all expenses direct and incidental, that yield will give the stockholder a clear profit of \$4,500 per month, or \$75,000 per annum. Yet unprepared to state the stock only runs at about \$5,000 per foot, what is simply ridiculous. For my part in spite of the arbitrary *division* of Montgomery street I hold the Napoleon high amongst its pretensions mine here, from another circumstance it is its position. On shipping ore from Copperopolis the freight is 50 per ton from Telegraph, only \$1. Now allowing the Union and Keystone also to yield and ship 400 tons per month, the Napoleon has the advantage of \$600 per month or \$9,000 per annum, an important item in expenses saved, and one, in my opinion, affording a respective equivalent for the acknowledged superiority of the Copperopolis ore. After witnessing the yield of ore, and the efficiency of the superintendent for a week, personally knowing the prices of freight and calculating the expenses of the entire works, I believe me to be an honest statement of the merits of the mine. If figures do not lie somebody made a great mistake in saying "there was nothing west of Copperopolis worth two straws." If there were in Napoleon, the Massachusetts mine would refuse such modest claims; and I should be waiting in truthfulness and justice to the district and the state were I to allow them to pass unnoticed. The claim consists of 2,700 feet in 15 shares. At present fifty hands are employed, the work being vigorously prosecuted day and night. Taken all in all, our friend Dumas may well be proud of the Napoleon, for the "nephew of my uncle" is not the only one of the name who bears mention.

I have been somewhat lengthy in my account of the Napoleon for two reasons—first on account of its own intrinsic merits; second on account of the relative bearing it has upon the wealth of the entire district. I shall proceed now to the southeasterly side of the same hill, probably a mile, to the

where there is said to be the Napoleon lead about the fixed course of which there is quite a difference of opinion. The first of these is the

#### LOTUS.

As no work was going on in the claim, I am unable to give particulars, further than it contains 4,000 feet, with a shaft sixty feet deep. Next comes the

#### STATE AND EXCELSIOR CONSOLIDATED.

These claims contain 1,200 feet in 8 shares, with main shaft sixty feet deep. No work going on, but I understood the indications were good. Adjoining this claim, running parallel, and quite close, is the

#### CONSTITUTION.

This claim contains 3,000 feet in 14 shares, with main shaft also about sixty feet. No work was going on in the claim, a circumstance I regret, as it prevented my forming an opinion as to their being on the Napoleon lead. The owners, I understand, are satisfied with their prospect. The rock certainly seemed favorable. The dip of these two claims is towards each other. From this, it is evident, both must be on the lead and they are so close that the younger claim will lose its honor whichever strikes the lead. I think it would be wise policy for them also to consolidate. The first in this direction is the

#### CAMP & MCNUITY.

This claim contains 1,500 feet in one foot shares; main shaft sixty feet deep. There has been much more work done here than on any of the preceding. A year ago it was quite celebrated for the mass of magnificent carbonates found near the surface some of which were exceedingly rich in gold. Mr. McNulty showed me the only four containing gold he had left; they were very handsome. These carbonates, of course, soon gave out in the case, as in many others without leading to an extended lead, and so the shaft still goes down, and I think they will have to go deeper than they expect. The principal interest attached to these claims, is the question whether or not they are on the Napoleon lead. I think it much could be said in favor of the affirmative side, and but little against it. Turning right round here, and traveling about a mile northeast, I found the

#### COLLIER.

It contains 2,200 feet in nine shares, with two shafts, one fifty feet the other eighty-five. This claim is doubly important just now, from the fact of its being considered on the Napoleon lead, and the only one in the district, besides that main shipping ore. If the character of rock is any indication, it cannot belong to the Napoleon. It is very peculiar, carrying more black oxide than I ever saw before. It ought to go from 15 to 20 per cent, averaging perhaps 18; the yellow ore reaches 25. The lead is established and settled, but not at present very large. I believe this lead, although half a mile from the Napoleon, is a separate lead, running parallel and north of the former, and will be found next to the

#### LOCKINAR.

This claim contains 2,500 feet in 27 shares; shaft about 45 feet deep. You must understand we have now come back to a few minutes walk to Telegraph City, steering north and leaving the Napoleon and Collier behind us. If the Collier is a distinct parallel lead, the Lockinav will strike it, not under 100 feet deep; the chances are it will be considerably over that. The rock looks well, it carrying considerable black oxide, copper pyrites, and yellow sulphurets. Were I a stockholder in any of these claims, I should watch the progress of the Lockinav with much interest for success here ensures success to McNulty and those adjoining him. Going still northeast, about another mile, we come to the

#### LIVE OAK.

Work in this claim is suspended on account of water, which is somewhat rare in this district; the claim, however, has a good reputation. It contains 1,200 feet in 12 shares; main shaft 60 feet deep. The rock carries an immense body of muck, and it is generally supposed it 20 or 30 feet more were added to the shaft, instead of drifting, a good vein would have been struck. Impatience to strike some thing sooner than nature allows has been a common evil here. In copper mining as a general rule three things are essential to success—first, depth; second, depth; third, depth. One deep shaft is worth twenty shallow ones. After spending any amount of money in foolish labor here they have found this truth out, and all now go in for depth. Thus more de-

velopments will be made next year of advantage to the community that during the last three years. In the same line bearing north, perhaps quarter of a mile, is the

#### TECUMSEH.

This claim contains 3,000 feet in 30 shares, with main shaft 100 feet deep. Mr. Batchelor is the superintendent of this mine as well as the Collier. I observe Mr. B. keeps his claims in admirable order and does excellent work. This is an established vein with every requisite; but some 20 or 30 feet more have to be added to the shaft before it is thoroughly opened. The Tecumseh is the last on the vein I have followed from the Collier, before it is supposed to dip into the Napoleon or main lead at the Hughes' claim on Quail Hill, a mile and a half hence, northwest; but before I speak of it I must mention the

#### TEXAS.

It contains 3,900 feet in single foot shares, with shaft 80 feet deep. This claim is about one mile or less from the Tecumseh, northeast, and in an isolated location on what is supposed to be another vein. The rock is of good character, carrying strong yellow sulphurets all the way down. Although evidences of a vein exist at the bottom, I could see no indications of luck. With them it is entirely a question of depth, a stout heart and a stout arm. We now turn in a northwesterly direction, and come to the

#### HUGHES' CLAIM.

This contains 1,800 feet in 12 shares. It is, perhaps, the most remarkable claim in the district. All the surface down to a considerable depth is good to crush for gold, some of it to sluice. It has assayed \$65 gold and silver to the ton. When first opened they also struck an immense deposit of carbonates, out of which they shipped 270 tons, averaging from 20 to 24 per cent. These, of course, gave out, and now they have commenced a new and permanent shaft which is to be continued until they strike the lead. Considerable labor has been done here, but not lately owing to a misunderstanding amongst the proprietors. The Hughes' claim has a high local reputation. On the other side of the hill are the

#### CONSTITUTION AND BUCKEYE.

The former contains 2,700 feet in 15 shares, with shaft 60 feet. The dimensions of the latter I did not obtain. I confess I am at a loss to say what vein those claims are on. The rock is good, carrying excellent sulphurets all the way, and in character strongly resembling the Texas. The Buckeye looks particularly well. It is, however, useless to speculate on their connection, for it is one of those contradictions sometimes occurring in mining, which time and labor can only explain and reconcile. Continuing onwards in about a northeasterly course for another mile or so, we come to the last in this direction—

#### THE NEW YORK.

This claim contains 3,000 feet in 1,200 shares. From Telegraph city it is due north three miles. The main shaft is 112 feet. It is developing itself in a splendid manner, promising to be a second Napoleon, to which the rock bears a remarkable resemblance. I have a very high opinion of this mine. I think a few weeks will make quite a discovery. I had here the pleasure of meeting an old friend whom I had not seen for three years, who is largely interested in the New York. I sincerely congratulate him upon his good fortune.

#### THE JOSEPHINE.

I have reserved the account of this mine until last, because adjoining the Napoleon on the west side, it would have confused my account from the direction I took to have introduced it sooner. The claim contains 1,300 feet in eight shares. The old shaft, 150 feet deep, is abandoned and a new one commenced. It is, of course, on the Napoleon lead, which there seems no doubt of striking in the new shaft, over which a good shed has been built. It is worked day and night.

This closes the account of Gopher district. You can now judge whether "there is nothing west of Copperopolis worth two straws." Before I close I must again express my thanks to the Napoleon people for renewed attentions; to Mr. Laughlin and Mr. Bowen for many civilities; to the superintendents generally for the liberal patronage they have extended to our paper. I trust under your able management they will find it ever faithful to the great interests of the State, and to the rights and privileges of the intelligent and industrious miner.

L. H.

October 27th, 1863.



As a PROOF of the correctness of our traveling agent's judgment, we understand Messrs. Rhemme, Herine & Co. have within a day or two assayed a small portion of the Massachusetts' rock, Copperopolis, Calaveras county, and it yielded \$3 12 in silver, and 17 1/4 per cent. in copper. The shaft is only down 30 feet. Our agent's prediction that another Union had been struck seems verified.

**G. E. MOORE,**  
Assayer and Analytical Chemist,  
No. 619 Sacramento Street.

HAVING ESTABLISHED A CHEMICAL LABORATORY, furnished with every requisite for delicate analytical work, is prepared to execute the Assay and Analysis of Ores, Mineral Waters, Guanos, etc., with accuracy and dispatch.

#### REFERENCES:

Prof. J. D. Whitney, State Geologist, San Francisco  
Albion & Co., San Francisco.  
Rafter & Church, San Francisco.  
John Purcell, San Francisco.  
D. O. Minn, Sacramento.

sep14

## ASSAYS!

**Promptness and Accuracy Secured**  
By the Use of the Most Improved  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,** (From Europe.)  
24 Government Block, corner of Sansone and  
Washington Streets, San Francisco. **Dr 6**  
"HINTS FOR PROSPECTORS" Free by Post.

**RIEHN, HEMME & CO.,**  
**ASSAYERS.**

Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.

**Assays Made of ores, Minerals  
and Metals.**

#### RECOMMENDED WITH PERMISSION TO

Messrs. F. PARROT & Co., Messrs. ALBION & CO.,  
R. B. SWAIN, Esq., DOBSON & RALSTON & CO

CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
Assaying, also in Mineralogy and Chemistry as far as re-  
quired to become a practical Assayer.

#### AGENTS WANTED.

We want a good Agent in every city, town and settle-  
ment, on this Coast. Applicants will send their names  
with reference, when specimen numbers of the **Min-  
ing & Scientific Press** will be forwarded to them,  
and their names added to our published "List of Agents."  
EWER & SMITH.

**EXCELSIOR IRON WORKS,**  
712 Sansone street,  
Between Jackson and Pacific, San Francisco.

**GALLAGHER & KENNEY,**  
Manufacturers of all kinds of

**Architectural and Ornamental Iron Work,**  
Bank and Store Vaults, Safes, Doors, Shutters, Bal-  
cony, Awn and Cemetery Railings, Gates, Stairs,  
Etc., and all kinds of Blacksmithing and Job-  
bing done with promptness, and at  
Reasonable Prices.  
Orders from the country promptly attended to.  
Jc13

**New Style of Ladies' Buckle!**

**W. BOHM,**  
INVENTOR AND PATENTEE.

THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the  
construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
possesses several very important improvements over any  
other in use.

The invention having been carefully examined at the  
Patent Office, has been adjudged to be a useful improve-  
ment, and Letters Patent have been granted for 17 years.  
It excels all other buckles in

**Usefulness, Strength and Appearance.**

The Public is respectfully invited to call and examine  
this Buckle at the Jewelry Establishment of

BRADFORDMAN & LEVY,  
622 Washington Street, San Francisco.  
JOSEPH, BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 1/2 Street, Sacramento.  
Agents for the Patent.

Every Buckle sold, stamped "W. Bohm," will be  
guaranteed as to its Strength and Durability.  
W. BOHM, Patent Att.

## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of the  
most effective, Economical and Durable Character. It may  
be safely said that Millions of Dollars have already  
been expended upon this vast enterprise in this dis-  
trict of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

#### ALONE STANDING THE TEST.

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

#### METHOD OF CRUSHING ORE.

The BRYAN BATTERY, as now constructed, is believed  
to combine all the improvements which the experience  
of the past has afforded. They have been

#### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

#### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ties. They are adapted to

#### BOTH WET AND DRY CRUSHING.

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent. more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1860, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing complete about 6,000 pounds,  
and the Five Stamp about 7,000. The Mortar Bed being  
cast in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co. Esmeralda,  
Crown Point Co., Gold Hill.  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora.  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Peteluma Quartz Co., Gold Hill.  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hewes, Howe & Co., Rich Gulch Flat,  
O. J. Benjamin & Co., Mexico,  
F. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

#### MANUFACTURED ONLY BY

**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

os 135 to 136 First street, and 130 to 144

Fremont street.

## MINING & SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES

A new volume of this extensively circulated paper  
commenced Sept. 11, 1862. It is intended that every  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits,  
together with several original engravings, of new inven-  
tions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietor to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published.

#### The Inventor!

Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having had  
great experience as Patent Agents, together with fac-  
ilities at Washington that enable them to obtain Patents  
with dispatch.

#### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its col-  
umns will from time to time contain original engrav-  
ings of new machines and inventions, together with a  
large amount of reading matter pertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.

#### The Mining Interest!

Will find it of great value, as it will contain all the  
news pertaining to Mining, the prices and sales of Min-  
ing Stocks, new inventions of Machinery adapted to that  
purpose, and of every thing generally that may be of ser-  
vice to the Miner.

#### To Chemists, Architects and Millwrights.

This Journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of infor-  
mation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Chan-  
cellors will not be neglected, engravings will be given of  
agricultural implements, and the farming interest gen-  
erally will be amply discussed.

#### Terms.

To mail subscribers:—Four Dollars per annum.]

#### Club Rates.

Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$10.  
Ten Copies for Twelve Months, \$30.

Names can be sent in at different times and from  
different Post-offices. Specimen copies will be sent  
gratis to any part of the country.

#### EWER & SMITH, Publishers.

Room 57, Government House, Corner of Washington  
and Sansone streets, San Francisco.

**I. C. E. KLEPZIG & CO.,**

**GUN MAKERS,**

...AND...

**DEALERS IN GUN MATERIALS,**  
733 Washington Street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.  
Gilding, and also Silver Plating, by E. Ekland. Jc21

**LEANDER RANSOM,**  
Civil Engineer  
AND

**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

#### ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

600,000 ACRES OF STATE SCHOOL  
LANDS.

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE, 328 Montgomery streets. oct-3

**D. NORCROSS,**

Masonic Temple, No. 6, Post Street.

Military Goods of all Descriptions.  
Navy Trimmings and Embroideries.

REGALA FOR ALL ORDERS.

aug 17

## PEOPLE'S OPPOSITION Steamship Line!

Special Notice.—The **Line** will  
have been withdrawn from the Ni-  
caragua Route until further notice.

#### GREAT REDUCTION IN RATES!!!

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
J. H. BETHEN,.....COMMANDER

Will be dispatched for PANAMA

From Mission Street Wharf.

FRIDAY, - - - - - NOVEMBER 13, 186

Punctually at 9 o'clock, A. M., on

Connecting at Aspinwall, by the Panama Railroad, with  
the Splendid Steamship

**ILLINOIS**.....2300 Tons.

The Moses Taylor, since her 1st trip has undergone  
the most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins enlarged, refitted and  
repainted throughout—making her accommodations equal  
to any Steamer on the ocean.

For further information or Passage, apply to  
J. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

**BOOK KEEPING,  
Penmanship**  
AND

**COMMERCIAL CALCULATIONS,**  
Taught by J. S. LUTY

**PRACTICAL ACCOUNTANT.**

305 Montgomery Street, Corner of Pine.

#### TO QUARTZ MINERS.

All persons interested in Mining Ma-  
chinery are invited to call at Donahue's Foundry and  
examine my improved Amalgamator. It is unquestion-  
ably superior to anything heretofore known for amalgamating  
Silver and Gold. It works 1000 pounds at a time, and  
will amalgamate over three tons a day. By the motion  
of the revolving muller, the pulp is drawn through its  
centre and passes under it, between the grinding sur-  
faces, to the circumference; from whence it passes again  
over the muller to the centre, through the holes and be-  
tween the grinding surfaces to the circumference as be-  
fore. Thus a constant circulation of the pulp is kept up,  
bringing the particles of ore again and again under the  
muller, and reducing the whole mass to an impalpable  
powder.

No quicksilver lies between the surfaces to be ground,  
but at the circumference and centre of the pan where the  
metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in De-  
cember last, and all persons are again warned against  
purchasing machines made at the Miners' Foundry called  
"Wheeler's Amalgamator," as they are an infringement  
on my patent, and a suit is now pending in the U. S. Cir-  
cuit Court against the parties infringing. My Amalga-  
mators can be seen running at Donahue's Foundry, where  
all can judge of their quality and the very superior  
style in which they are being manufactured.  
sep21 THOMAS VARNEY.

## PATRONIZE HOME MANUFACTURERIES!!!

**James Longshore,**

**Trunk and Valise Manufacturer,**

307 Sansone Street, under Tehama House. Trunks and  
Valises, Wholesale and Retail, Fine Sole Leather Trunks,  
Valises, and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
aug x

#### APARTMENTS.

FURNISHED APARTMENTS, WITH OR WITHOUT  
Board, at 1018 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
home will do well to apply. Jy6

## FOR SALE.

PATENT PRESSED RUSSIA IRON MINING FANS,

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Friction and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipe  
Cooking Stoves and Heating Stoves  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Lead Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

#### UNEQUALLED

**MONITOR COOKING STOVE**

**Or RANGE,**  
For Hotels.

To which we call particular attention.

Jc-20

TAY, BROOKS & BACKUS.



## BUBBLE MINING AND HOW TO AVOID IT.

The recent developments concerning the Santiago, Daney, and several other mines of lesser note, are teaching a lesson which will not be without profit to all reflecting people engaged in mining enterprises of any character. These developments could not have occurred more *opportune*. That they will be productive of beneficial results we fully believe, and it is a matter of no small congratulation that the cost of the lesson has fallen chiefly upon shoulders abundantly broad to bear the burthen.

It may be that legitimate enterprise will suffer to a great extent in consequence; but it should be borne in mind, that had further delay have been made, the consequences would have been far more wide spread and ruinous. Not a doubt can be entertained that numerous similar speculations have for a long time been in process of "cooking," and these timely developments will undoubtedly have the effect to nip many an "operation" in its incipency, and for a time, at least, prevent the attempting of any new schemes of similar character.

Such are the present facilities for the formation of joint-stock companies, and so great has been, of late, the desire for this class of investment, that it is scarcely possible that the two or three bubbles which have already burst can be all that have been swimming in emptiness upon the ocean of speculation with which we are surrounded. Our faith in human nature is too weak to discredit the idea that we have not in our midst yet other unscrupulous adventurers, who have been taking advantage of these favoring circumstances to devise schemes for filling their own pockets at the expense of others. When we consider how simple the process and how considerable the object to be gained, we need not wonder that, among California operators, men are found ready and willing to embark in such promising enterprises.

The first step in a scheme of this kind is to select a vein where at least a small quantity of gold, silver or copper can be obtained, and if near a prosperous concern all the better.

Two or three flaming reports of surface indications, or early developments, are then spread abroad through the newspapers, after which a "Company" is organized. A secretary is now obtained, who, with the promise of a permanent appointment and a liberal *bonus*, is willing to be made a tool in the villainous scheme. A majority of the directors are either lured into it by paid up shares or liberal fees, or they are selected for the facility with which they may be controlled by the schemers. A superintendent is next sought out, who will be swift to do the bidding of his employers. Now follows the farce of a development. An "incline," perhaps, is commenced, and extended downward a hundred feet or so; a small quantity of ore is taken out, and *saltd*, perhaps with gold or silver, or perchance with rich ore *bought* or *stolen* from another mine. The ore thus "cooked" is taken to some mill of established reputation, crushed, and a certificate of the extraordinary yield taken for publication and for private circulation. If the scheme is a large one, this operation is repeated two or three times. Its cost is comparatively nothing, as the proceeds go back into the hands of the schemers. The stock is now put into the market, the "extraordinary" results advertised and editorialised in all the leading dailies; shares are eagerly sought for and reported in great demand, as they really are. Everything looks fair and promising. Even an expert, who may be permitted to visit the mine, if not especially on his guard, will be deceived by the plausible reports from the mill into really believing that the worthless rock before him is a valuable ore. This may all the more readily occur from the fact that but very little difference can ordinarily be seen by even the practiced eye, between rock that will barely pay the expense of crushing, and that which will pay a handsome profit over both milling and mining. Under the excitement the projectors sell out to their dupes, and the swindle is accomplished ere the first dishonest act is detected.

But, it will be asked, how are the public to distinguish between a legitimate and profitable enterprise and one of these swindling schemes. First, no man should invest a dollar in any mining enterprise until he has previously ascertained that the directors and superintendents are men of acknowledged standing for honesty and probity. While it is admitted that mining enterprise, in this State, may have attracted more than its average of unreliable or absolutely dishonest men, it is not right, or at all warrantable, to assert that capitalists who are willing or desirous to invest in such operations, can-

not find a fair amount of honest operators, even in this branch of business, with whom to entrust their ventures. Mining directors, superintendents and secretaries, should be men of high character, who should be considered responsible to society, if not to the courts, for the correctness of their reports and the rectitude of their action in their respective spheres. Legitimate mining enterprises will never succeed, in this or any other country, except under such management. Let men of means refuse to invest a dollar in any enterprise that is not in the hands of managers who have a standing in the community. Such a course will do more than anything else to expose and keep down the hollow and worthless schemes which, under other circumstances, will always be concocted to delude the incautious or inexperienced.

It is dangerous to the community, and disastrous to the business, to countenance in such positions men who have proven themselves dishonest or who are recognized only as shrewd schemers. Whoever buys mining stock controlled by such men, may calculate the chances as more than even that they will be in some way "roped in" or "swindled." We fully endorse the advice of an evening cotemporary who remarks that "suspicious characters must be expelled from the directory of all mines that expect to gain legitimate standing. No man should put money in any mine unless he has good reason to know that the management is in honest and competent hands. Above all, no one should risk all he has in any mining enterprise, for at best it is very much of a lottery."

The idea is not a bad one which has recently been broached in the city of London, to counteract the very evil of which we are writing, and which has recently assumed quite an importance even in that old established headquarters of English mining. Several leading mining men are there moving in the matter of the organization of an association, which shall act as a medium of communication between men who are seeking mining investments, and through which any man desiring to invest may ascertain the character and standing of the men who control the various companies; the society to have its headquarters at London, with branches throughout all the mining localities. Much good is predicted from the influence and working of such an organization. We are not yet fully advised of the details of the plan. Should anything definite be arrived at we shall lay it before our readers.

## ANOTHER HUMBUG EXPOSED!

The San Francisco (Colorado) Placer Mines a Myth.

By the Brother Jonathan, which reached this port on Friday week, arrived several persons returning from the new San Francisco diggings—so called—about the extraordinary richness of which so much has been said of late. We have obtained the information, which we subjoin, from Mr. Robert Hamilton, of this city, a gentleman of the most unimpeachable veracity. Mr. H. spent two weeks in the diggings, visiting both the Walker's and Weaver's diggings, conversing with great numbers of miners, or rather, prospectors, for there is no mining, worth the name, going on there. He and his partner, in the course of their prospecting, sunk at least 25 holes to the bed rock, and, in no one instance, found anything more than the mere color; nothing which indicated anything more than fair sluice diggings, when plenty of water could be had at a reasonable price. He returned from the diggings, as far as Le Pas, with twelve others, all experienced prospectors from Boise River, each of whom agrees with himself in pronouncing the mines the most unmitigated humbug which has ever been started in California! Several of the company had been in the mines since last July, and all the gold brought away by the entire party belonged to one man, and consisted of a nugget worth about \$2 50 which was taken, by him, from a claim belonging to a company, one of the members of which was a friend of his. This man spent some two days on the claim, and was allowed to crevice on his own account, which he did. All he obtained for this labor was the \$2 50 nugget. This is the only claim in all that region which has yet been found to pay expenses to a white man! Mr. Hamilton has given us a full and as particular a description of the mines and the route thither as could be obtained in so brief a time—two weeks—which he thinks is quite sufficient to learn all that will ever be profitable to any one of that country. He spent the first week in October in and about the Weaver's diggings, and the subsequent week in Walker's diggings, about forty-five miles distant. The entire ground comprised by the former is a small gulch, some two or three miles long by a

few rods in width. This gulch is occupied exclusively by Mexicans, from 400 to 500 in number. The only person of any other nationality among them was a blacksmith, who supported himself by plying his trade at sharpening picks. The bed of this gulch is covered with boulders, among which is a little gravel. It requires three men constantly at work to get gravel enough for one man to pan out! All the water for panning was obtained by sinking holes to the bed rock. There is not a single rocker at work in either Walker or Weaver's diggings, nor was there water enough in either place to work one while he was there—nor had there been since the diggings were discovered, so far as he could learn.

He saw a large number of rockers in the possession of miners along Antelope Creek, packed there with the expectation of using them, but he never saw one which had ever been put together for use! The only place where it would have been possible to work a rocker at all was where the trail first strikes Antelope Creek, and where, within the space of less than half a mile, some twenty Mexicans were at work with pans—barely paying expenses. The prospects were so poor that no Californian, after prospecting, ever thought of stopping there. At this point was nearly all the water, except that obtained by digging, which was to be found in the entire region for fifty miles around. There was so little here, that the twenty Mexicans at work with pans rendered it so muddy that it was with difficulty the mules could be forced to drink from it!

From this point for about forty-five miles up the dry bed of Antelope Creek, and the gulches emptying into it, from the hills on either side, our informant and his partner prospected, and met numerous other prospecting parties, not one of whom had ever found a place which they considered of sufficient value to locate and wait for the rains, even if they had been sure of their coming within a few weeks.

At the northern extremity of this forty-five miles of dry creek bed, is a sort of ravine or gulch, where the creek—when it is a creek—appears to have its rise. This ravine is some five or six miles long, with an average of a few rods in width. Along this ravine were scattered a few claims which had been prospected and were thought of sufficient value to locate. The owners were among the first comers, and each claim had some person stopping upon it and holding it for the benefit of the company, the most of whom were out in the mountains prospecting. Only one claim of the entire number was being worked, and that by two men with a pan! Our informant said he did not know what it was paying, but considered it doubtful if they were any more than making expenses. In the course of his prospecting, he found several places which he thought might pay with a sluice and good head of water. The prospect of water there was considered very doubtful by all. Nothing definite could be obtained with regard to the rains from any person. The general impression was that some time during the winter they would get a little rain, but probably not more than enough to work much except while it was raining. Neither the general features of the country or the bed of the creek presented indications of anything more. Our informant pronounces the reports of dry digging by crevicing, blowing, winnowing, etc., of which we have heard so much, without any foundation, whatever, except in one solitary instance.

Just at the lower point of the mountain range which separates Walker's from Weaver's diggings, and a mile or two from where the trail strikes the Antelope Creek, as already described, are two claims, each comprising about one-half of an acre of ground. These claims are located on the top of the hill or mountain some 300 feet above the bed of the creek. One of them hardly pays "grub." From the other there has undoubtedly been a large amount of gold taken; all coarse gold, in pieces, none less than two-bits in value, and from that up to \$150. Our informant has seen one worth about the latter sum, and numerous others from one dollar in value up to \$100. This claim, which is worked by crevicing, was taken up by two Frenchmen. Its value soon became known, and the report that the Frenchmen carried a large amount of gold about their persons tempted a couple of Mexicans to attempt a robbery. One of the partners was attacked and mortally wounded. He killed one of his assailants as he lay upon the ground in his death agony; the other fled without getting any of the treasure. The surviving partner soon after sold out the claim for five hundred dollars—there appears to be no doubt about the amount—took an escort of twelve men, and started with his own



and his partner's gold for Le Pas. Our informant met the party about half way on their road as he was going to the mines. Report says he took with him 100 pounds of gold. Our informant don't believe any such thing. He probably took a large amount, however. The claim was, undoubtedly, pretty well worked out before he sold.

How the gold was deposited in this claim is a mystery to all who have examined the locality. It is smooth and water-worn, and a long distance from the creek. Not the color of gold is found for more than a mile around, except on this one little place on the top of that hill.

The entire region for 100 miles is being thoroughly prospected, but, at the time of our informant's leaving, without resulting in finding anything of value. This last grand humbug has doubtless been gotten up for speculative purposes, by a few copper mine owners near Le Pas to attract workmen to that locality, and a ferryman or two on the Colorado. The affair has since been stimulated and the cheat kept up mainly by a few Jew traders at La Pas, who had been induced by the first reports to take goods to that locality. The San Francisco mines may be set down as a most arrant swindle.

#### MEXICO—HER TRADE AND MINES.

The rapidly increasing trade between this city and the various ports on the gulf of California, has induced the steamship owners, Messrs. Holladay & Co., to place the Steamer Panama in the line, and we shall now have regular departures of steamers semi-monthly, for the ports of Mazatlan, La Pas, and Guaymas. The Steamer Panama cleared for these ports on Thursday last, with a full freight of passengers and merchandise, including large quantities of machinery, tools, etc., for the various silver mines now being energetically worked in Lower California and Sonora. Among the passengers were many miners from the Washoe and Esmeralda districts, who having made a prospecting trip to the Mexican mines, are now returning with a conviction that a field for labor and profit is opened in that section of country far surpassing anything offered in more northern latitudes. The inducements held out by the Mexican Government for the enlistment of American enterprise in the matter of working the mines of that country are certainly very great, especially as so many well known and exceedingly rich mines, partially opened, but abandoned for the want of necessary capital to work the same, are to be obtained by a compliance with the Mexican mining laws, which are very liberal in this matter. Others of equal value, and being worked by the rude and primitive style of Mexicans, are to be obtained by a fair and equitable arrangement with the owners thereof, who are very ready to dispose of their mines to American companies, providing the necessary capital is employed in the development and working thereof.

The port of La Pas, Lower California, is open for the shipment of ores free, and all mining tools and machinery are admitted free of duty. Miners are not taxed, and the influx of Americans is hailed with delight. The climate is not excelled in any other part of the world; the weather in Lower California, especially, never being either too cool or too hot.

A large number of mines in Lower California and Sonora are now being successfully worked by San Francisco companies, among which may be mentioned the "Pena," "Trunfo," "La Marroñena," "San Antonio," "Gobernadora," "Ophir," "Codicila," and others on the Peninsula; and the "Palma" and others in Sonora. The Palma mine has more recently been taken possession of by its present owners, but from indications presented by the large shipment of tools, etc., on the Steamer Panama, we are led to believe that the company intend to work the mine, which has a very favorable history, with the greatest vigor. The "Triunfo" Company, we learn, have nearly completed their mill, at an expenditure of some forty thousand dollars. The "Marroñena" Company have out a large amount of rich ore, which they intend shipping to England early in the coming season. Several of the other companies, we are informed, also intend shipping their ore to England as being the most judicious move at present, the transportation to ship being only 18 miles from the mines. The "Palma" Company (Sonora) will erect works near their mine, which can be done at comparatively small expense, as they have an abundance of water power near by.

From information which we have gained relative to the mining interest in Mexico, we are induced to form the most favorable opinions. The fact is indisputable that Mexico is a silver bearing country—that Government titles are given to no mines in that country, except on information satisfactory to the Government that the mines are good. When a title is obtained by regular denouncement or purchase, it can be relied on as safe and secure, being protected by the Government. No revolutions in Mexico ever have or ever will effect the mining interest, so long as that interest is confined to its own legitimate channel; and private titles obtained from the

Government will be equally respected by any power which, perchance, may in the future have possession there.

We have not time to enlarge on the subject of the mining interest in Mexico in this number, but will, in some future number, have more to say on this great and growing subject.

#### THE MINING SHARE MARKET.

The mining share market has been much excited during the week by exciting reports with regard to the management, or rather mismanagement, of the officers of two or three corporations; notwithstanding which, about the usual amount of business has been transacted.

Ophir have been the chief speculative shares. They commenced the week at \$1,425, and gradually declined to \$1,150, seller 30 days, on the announcement of a dividend of \$24 instead of 48 per foot. Near the close of the week, a telegraphic dispatch was received of a rich discovery in the northern portion of the mine, upon the strength of which the stock was carried up to \$1,650 on 30 days, but finally closed at \$1,475, with a weak market. The sales for the week reached the number of 1482 shares, a larger business in this stock than ever before reported for the same period.

Burning Moscow continues much in favor with speculators. The shares advanced materially on receipt of intelligence of an injunction against the Ophir, but receded to about previous figures on advices that an application to modify the injunction had been refused.

No other especial features have been observable in the market during the week. We refer to our report of stock bids and sales.

#### REPORT OF BIDS

At the San Francisco Mining Stock Board,

For the week ending Nov. 7, 1863.

Names of Companies.	Shares per ft.	Par Value.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Latest Asking Price.
<b>WASHOE STOCKS.</b>									
Ophir	12	\$300	1400	1450	1420	1250	1325	1400	1450
Gould & Curry	4	500	4300	4350	4450	4400	4575	4600	4800
Savage	1	2700	2650	2700	2750	—	—	—	3600
Chollar	4	300	650	700	700	600	775	—	900
Potosi	2	500	1-25	—	—	—	—	—	1500
Idale & Norcross	2	500	—	900	—	—	500	875	1000
Sierra Nevada	1	500	90 1/2	95	9 1/2	9 1/2	50	85	100
Danby	4	500	85	92	115	130	107	102 1/2	105
Burning Moscow	2	100	85	315	320	300	290	287 1/2	290
North Potosi	1	300	33	34	37	30	32 1/2	40	37 1/2
Meredith	1	125	—	—	—	—	—	—	—
Charles Canby	1	30	—	5	12	13 1/2	10	10	15
Sacramento	1	500	—	—	—	—	—	—	—
Iowa	1	—	—	—	—	—	—	—	80
El Dorado	1	—	—	—	—	45	—	40	46
Norton	1	—	—	—	—	—	7 1/2	7 1/2	8
Burnside	1	—	10	—	8 1/2	12	9	8 1/2	8
Adriatic	—	—	—	—	—	—	—	—	—
Brennus	—	—	—	—	—	—	—	—	15
Pride of the West	—	—	35	30	35	—	—	—	50
G. H. Quarz M. Co.	—	—	—	—	—	—	—	—	—
Imperial	—	—	—	—	300	—	—	—	315
Four Hill Tunnel	—	—	1	1	—	—	—	—	215
Mount Davidson	1	200	—	—	—	—	—	—	344
Central	12	300	—	—	—	—	—	—	—
California	12	300	—	—	—	—	—	—	—
Rogers, F. D.	1	250	—	—	—	—	—	—	—
Lucerne	1	100	—	—	—	—	—	—	—
Lady Bryan	1	500	—	—	—	—	—	—	—
La Crosse	—	—	—	—	—	—	—	—	—
West	—	—	—	—	—	—	—	—	—
Crown Point	—	—	—	825	—	—	—	—	1000
Mountain	—	—	—	—	—	—	—	—	—
Hudson	—	—	—	—	—	—	—	—	—
Lady Ellen	—	—	—	—	—	—	—	—	—
Schiller	—	—	—	—	—	—	—	—	—
Seneca	—	—	—	—	—	—	—	—	—
Ventura	—	—	—	—	—	—	20	20	50
<b>ESMERALDA STOCKS.</b>									
Wide West	1	600	72 1/2	75	75	70	67 1/2	68	70
Antelope	1	500	—	—	125	—	100	—	150
Esmeralda	1	1000	10	—	—	—	10	—	20
Road Del Monte	1	400	—	—	355	—	—	—	460
Utah	1	250	55	55	50	47 1/2	50	48	50
Sierra Hill	1	500	19	20	18	18	18	17	24
Nevada	1	250	—	—	—	—	—	—	20
Federal Hope	1	—	—	—	—	—	—	—	300
South Utah	—	—	—	—	—	—	—	—	—
Jenny Lind	—	—	—	—	—	—	—	—	6
Falls of Clyde	—	—	—	—	—	—	—	—	18
Sanbeam, S. W. ex.	—	—	—	—	—	—	—	—	13 1/2
Bamboo	—	600	—	—	—	—	—	—	75
Great West Tun.	—	—	—	—	—	—	—	—	40
Birington	—	—	—	—	—	—	—	—	—
El Paso	—	—	—	—	—	—	—	—	55
Crockett	—	100	25	—	—	—	40	45	—
Etna	1	100	—	—	—	—	—	—	—
<b>COSO STOCKS.</b>									
Josephine	2	250	9	—	8	7	8	—	9
Willow Springs	1	100	—	—	—	—	—	—	8
Empire	—	—	—	—	—	—	—	—	—
Coso	—	600	—	—	8	10	—	—	14
<b>MEXICAN MINES.</b>									
Mina Prieta	—	1000	—	—	—	—	—	—	—
Dior Padre	—	—	—	—	—	—	—	—	—
<b>COPPER STOCKS.</b>									
Napoleon	1	600	—	—	—	7	7	6	57 1/2
Josephina	—	—	—	—	—	—	—	—	10
<b>CALIFORNIA STOCKS.</b>									
Laurel Hill	—	—	3	3 1/2	2 1/2	8	3 1/2	6	—
Chiles Digings	—	—	—	—	—	—	—	—	—
Eureka	—	—	22 1/2	—	—	—	—	—	60
Fellows	—	—	—	—	—	—	—	—	—
Rock River	—	—	—	—	—	—	—	—	—
Utica	—	—	—	—	—	—	—	—	—
<b>HUMBOLDT STOCKS.</b>									
De Soto	—	—	5 1/2	—	—	—	32	—	30
Great Basin	—	—	—	—	—	—	—	—	5

#### SALES FOR THE WEEK ENDING NOV. 7, 1863.

##### MONDAY.

30 Burnside \$11 per share.	24 Ophir, 1400 per foot, s. 80
4 Burnside, 14 per share.	12 Ophir, 14 1/2 per foot.
10 Overton, 600 buyer 10 days.	44 Burning Moscow, 325 per foot.
10 Michigan, 42 50 per share.	8 Burning Moscow, 325, b. 30.
10 Michigan, 40 per share.	10 Burning Moscow, 322 50 per foot
20 Michigan, 42 50, buyer 30.	16 Bur ing Moscow, 105, r. w.
10 North American, 62 50 per share	20 Shiba, 140 per foot.
20 Sierra Nevada, 94 per share	11 Uclesam, 135 seller 15 days.
10 U. C. Esmeralda, 15 per share	20 Uclesam, 200, seller 20 days.
5 North Utah, 24 per share.	11 Uclesam, 200, seller 5 days.
5 Wide West, 84 per share, br. 30.	6 North American, 62 per sh.
10 Silver Hill, 10 per share.	6 North American, 62 1/2
10 Silver Hill, 19 50 per share.	30 Madison, 47 1/2 per share.
5 Silver Hill, 20 per share.	40 Daney, 60 per share, b. 10.
15 Maxwell, 75 seller 30 d.	60 Ophir, 1700, 50 days.
24 Uclesam, 200 per share.	24 Ophir, 1500, 30 days.
10 Julia, 6 per share.	24 Ophir, 14 1/2, r. w.
12 Ophir, 1450, per foot, r. w.	12 Ophir, 1500 buyer 3 days.
12 Ophir, 1400 per foot, s. 70.	32 Gould & Curry, 4500.
12 Ophir, 14 1/2 per foot, r. w.	5 Gould & Curry, 4500, Nov. 13th
	10 Burning Moscow, 300.

##### TUESDAY.

5 Wide West, \$75 per share.	10 Burning Moscow 310, buyer 30.
16 Sierra Nevada, 95 per share.	5 Wide West; 80 per foot
20 Madison, 60 per share.	10 Mountain View, 16 50.
10 Norton, 8 per share	10 Bullion, Gold Hill, 45 per foot.
10 Hackeye, 12 per share.	2 Shiba, 160, 10 per foot, buyer 50.
10 Utah, 55 per share.	4 Shiba, 135 per foot.
20 North American, 62 50, per sh	10 Teal, Esmeralda, 35 per foot.
20 Burning Moscow, 63 per share.	100 Tucker, Esmeralda, 75 cents.
20 Burning Moscow, 197 50 per foot	15 Madison, 47 per foot.
50 Burning Moscow, 320 per foot.	5 Debo, Nevada county, 20 per foot
10 Burning Moscow, 320 per foot.	2 Huachuca, 95 per foot.
32 Burning Moscow, 3 0 per foot.	30 Chum, 67 per foot.
20 Burning Moscow, 325 per foot.	5 Orest, 0 12, 10 per foot.
10 Burning Moscow, 340 per foot.	10 Agamemnon, D. R., 10 per foot.
40 Burning Moscow, 300, br 30.	50 Open Sesame, 5 1/2 per foot.
20 Burning Moscow, 300, br 25.	50 Open Sesame, 37 1/2, r. w. per foot.
50 Burning Moscow, 300, br 20.	5 Melones, 77 1/2 per share.
10 Burning Moscow, 305, br 45.	10 Melones, 75 per share.
4 Burning Moscow, 355, br 30.	10 Burnside, 9 1/2 per share.
2 Burning Moscow, 355 per foot.	5 Burnside, 10 per share.
2 Burning Moscow, 355 per foot.	14 El Dorado, 50 per share.
20 Burning Moscow, 345, buyer 30	5 Uclesam, 180 per share.
6 Burning Moscow, 325 per foot.	36 Ophir, 14 1/2 per foot.
10 Burning Moscow 335 buyer 30.	92 Burning Moscow, 340 per foot.
12 Ophir, 1450 per foot, seller 30 d.	10 Baruluc Moscow, 130 buyer 18.
72 Ophir, 1440 per foot, seller 30 d.	10 Burning Moscow, 361, buyer 30
12 Ophir, 1500 per foot.	40 Burning Moscow, 340 per foot.
20 Daney, 9 per foot.	10 Burning Moscow, 362, buyer 10
10 Shiba, 150 per foot.	50 Burning Moscow, 340 per foot.
2 Crown Point, 8 1/2 per foot.	10 Burning Moscow, 341 per foot.
10 Scottish Chief, 7 per foot.	20 Shiba, 140 per foot.
12 Ophir, 1420 per foot.	4 Paris, Gold Hill, 49 per foot.

##### WEDNESDAY.

100 Josephine, Copper, 7 per share.	3 Pacific, Grass Valley, 150 pr shr.
10 Chas Canyon, 12 per share.	10 Napoleon, Copper, 75 pr sh. b. 60
10 Norton, 8 25 per share.	30 Napoleon, Copper, 75 pr sh. b. 60
5 Sierra Nevada, 94 per share.	10 Grass Valley, 40 per share.
70 Bodio No. 2, 4 per share.	10 Sierra Nevada, 82 1/2 per share.
15 Madison, 50 per share, buyer 30.	10 Bob Polk, 11 per share.
5 North American, 64 per sh. br 30	20 Josephine, Copper, 8 per share.
10 El Dorado, 48 per share.	10 Madison, 45 per share.
10 Uclesam, 200 per share, 30.	40 Burning Moscow, 315 per foot.
10 Silver Hill, 19 per share.	10 Burning Moscow, 310, seller 10.
10 Utah, 50 per share.	10 Burning Moscow, 312 1/2 per foot.
10 Burning Moscow, 340 per foot.	40 Burning Moscow, 310 per foot.
10 Burning Moscow, 257 1/2, buyer 30.	42 Ophir, 14 1/2 per foot.
32 Burning Moscow, 355, seller 30.	12 Ophir, 1400, seller 70.
10 Burning Moscow, 3 5 per foot.	36 Ophir, 1300, seller 30.
50 Burning Moscow, 350, buyer 30.	60 Daney, 1 1/2 per foot.
26 Burning Moscow, 3 5 per foot.	10 Shiba, 1 1/2 per foot.
6 Burning Moscow, 322 per foot.	5 Huachuca, 100 per foot.
16 Burning Moscow, 3 0 per foot.	10 Uclesam, 200 per share.
4 Burning Moscow, 321 per foot.	25 Lady Washington, 65 cts.
24 Ophir, 14 0 per foot, r. w.	10 Manzanillo, 3 50 per foot
24 Ophir, 1400, seller 30 days.	10 Burning Moscow, 360, buyer 30.
48 Ophir, 14 1/2 per foot, r. w.	5 Sac. La Belle, Copper, 8 per foot.
12 Ophir, 1400 per foot, seller 30.	10 Open Sesame, 50 cts per foot.
60 Ophir, 1420 per foot.	10 Jackson, Humboldt, 25 per shre.

##### THURSDAY.

25 Burnside, 12 per share,	20 Burning Moscow, 320, buyer 30.
5 Wide West, 75 per share.	10 Burning Moscow, 305 per foot.
5 Wide West, 60 per share, buyer 30	10 Union, Gold H-h, 10 per foot.
10 Wide West, 77 50, buyer 30.	20 Feet of Gould & Curry Dividend
20 North American, 60 per share.	for November, \$125 per foot.
5 Teal, Esmeralda, 37 50 per share	20 Feet of Ophir Dividend for De-
10 Utes, Esmeralda, 68 per share.	cember, \$20 per foot.
5 Sierra Nevada, 97 50 per share.	50 Manzanillo, 1 1/2 per foot.
24 Ophir, 1360 per foot.	12 Ophir, 14 1/2 per foot.
34 Ophir, 1300, per foot, seller 30.	40 Daney, 1 1/2 per foot.
12 Ophir, 1380 per foot, seller 30.	30 Burnside, 10 per foot.
60 Daney, 1 1/2 per foot.	10 Burning Moscow, 312 1/2 per foot.
10 Shiba, 1 1/2 per foot.	1 San Francisco, 25 per share.
20 Shiba, 125 p r foot, seller 30 ds.	25 Comet, S. R. 4 per share.
10 Burning Moscow, 30 per foot.	10 Teal, Esmeralda, 36 per share.
10 Burning Moscow, 305 per foot.	10 Open Sesame, per share.
10 Burning Moscow, 305 pr foot, r.w.	15 Hudson, 45 per share.



**DISCOVERY OF A SILVER MINE ON LAKE SUPERIOR.**—I here is considerable excitement at the East connected with the Lake Superior trade, in consequence of the discovery of an immense deposit of silver bearing lead in that region. Marquette county is the locality of this new discovery. It is stated that the ore yields 20 per cent. of pure lead, and that every ton of lead yields 25 pounds of silver, worth \$300, besides the value of the lead. Operations will be commenced ere long for "removing the deposits."

**CHEAP POSTAGE.**—As might be expected, the establishing of a uniform rate of letter postage throughout the United States has had the effect to greatly augment correspondence between the Atlantic and Pacific States. For example, says the *Alta*, there has been an increase of 25,000 letters via the Overland Mail route since the new law went into effect on the 1st day of July last.

The largest water wheel in the world is about five miles from Douglass, on the Isle of Man. Its diameter is 72 feet, width 5 feet, has 168 buckets 19 inches deep, each holding 9 gallons. It exerts the power of 120 horses, and raises water and coal 484 yards. The axle-centre and crank weighs 33 tons, and the wheel performs four revolutions per minute with the buckets but half filled. It takes two quarts of oil per day to keep it running smoothly. The cost of the wheel was £3,000 or nearly \$15,000.

**AN EAGLE'S FLIGHT.**—It has been ascertained by a traveler in the Grisons, Switzerland, than an eagle flew in his sight five miles in five minutes.

**MINING AGENCY.**—By reference to our advertising columns it will be seen, that we have made arrangements to obtain special information, through a resident correspondent, with regard to any particular mine at Reese River. Parties in the city about to invest in "feet" in that neighborhood, and not having time or caring to incur the expense of visiting the locality, will do well to avail themselves of the opportunity hereby presented of securing reliable information, previous to investment, at a moderate cost.

Persons already holding "feet" and desirous to learn through a disinterested source the actual condition of the mine in which they may be interested, will do well to embrace the opportunity here presented of securing the desired information.

We shall establish agencies similar to the above in all the principal mining districts, at an early day.

### Owens River Canal Company.

#### FOR SALE,

FOR ACCOUNT OF THE COMPANY, 7,000 SHARES OF the above stock, at \$1 per share. It is confidently presented to the public as the best investment, for the price, now offered in this market.

Office of the Company No. 323 Montgomery street.

### New Patent Agency.

**WE HAVE CONNECTED WITH THE** Publication of the "Mining and Scientific Press"

**The Patent Agency Business,** and would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency** The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. **EWER & SMITH.**

**FOREIGN PATENTS OBTAINED** By application at this office, Room 57 Government House. **EWER & SMITH, Solicitors.**

### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. **EWER & SMITH.**

### PATENT RIGHTS.

**Patent Rights Bought and Sold,** At the office of the "Mining and Scientific Press" Agency **EWER & SMITH.**

### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper. For charge, they merely furnish the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. **EWER & SMITH.**

### GENERAL NOTICES.



### DR. H. AUSTIN, DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. **JE-29**

### DESKS

AND

Office Furniture, OF ALL KINDS.....FOR SALE BY **JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all kinds, attended to.

### SQUARZA'S PUNCH.

#### FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

#### ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

### FREDERICK MANSELL,

MECHANICAL & ARCHITECTURAL

DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. **MAR-28 2m**

El Paso District, Los Angeles County,

### MINING AGENCY

C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

LETTERS OF ENQUIRY containing Revenue or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to.

The subscriber has a carefully prepared map, (and specimens) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to **J. Burnett, Esq., 425 Davis St., San Francisco Cal.** El Paso, June 21, 1863. **C. W. TAPPAN.** and

### R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,

**JOB TURNING & SCROLL SAWING.**

### BRACKETS,

RED WOOD BALUSTERS,

NEWEL AND CEDAR BALUSTERS

for Stairs.

Manufacturers of every description of Oval,

Circular and Square

**PICTURE & LOOKING GLASS FRAMES**

For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS.

H. C. SOMES

### MINING LAWS AND FORMS

**JUST PUBLISHED BY H. H. BANCROFT** & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. **SEP-14**

### H. C. KIBBE,

MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

### GENERAL NOTICES.

### HAYNES & LAWTON,

IMPORTERS AND DEALERS IN

### CROCKERY,

GLASS WARE,

### FRENCH CHINA,

Coal Oil Lamps, Table Cutlery

### CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

NO. 516 SANSOME STREET

[CORNER OF MERCHANT.]

SAN FRANCISCO.

### WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* These Pans can be seen in daily operation at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. **7-16-1f** **ZENAS WHEELER.**

### Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

### REMOVAL.

**OFFICE OF THE PACIFIC METAL** Largest Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased. COPPER ORES—Highest market rates advanced in cash, for shipments. **S. C. BRADSHAW, Agent,** 509 Sacramento street, near Sansome.

### NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Webb,

SAN FRANCISCO.

GEO. A. MITCHELL.

D. S. HUTCHINSON.

### METAL F & HUTCHINSON'S

PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

**\$3. Per Dozen!**

Large sized Photographs \$3—Extra copies \$1 each. AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. **aug.**

### HOTELS.

### International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

**FIRE-PROOF BRICK BUILDING.**

Most convenient to the

Steamer's Landing, Business and Places of Amusement

**OPEN ALL NIGHT.**

City Railroad Cars Pass the Door.

**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent Spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;**

and SETS AS GOOD A TABLE AS ANY HOUSE IN THE CITY. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

**F. E. WEYGANT, PROPRIETOR.**

### Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY** advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles, WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL **F. E. WEYGANT, Proprietor.**

For the accommodation of my many guests I have taken and refurbished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

**F. E. WEYGANT.**

### THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,

SAN FRANCISCO.

STEPHEN SMITH.....PROPRIETOR.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House **Free of Charge.**

The House is open all night.

### P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

### FOR PANAMA.

The following Steamships will be dispatched in the month of November, 1863.

**Nov. 3d, - - - Steamer Golden Age.**

**Nov. 13th - - - Steamer St. Louis.**

**Nov. 23d - - - Steamer Orizaba.**

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

At 9 O'CLOCK, A. M., PUNCTUALLY. And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

**A. B. FORBES, Agent.**

Je4 Corner of Sacramento and Leidsdorff sts.



# MINING AND SCIENTIFIC PRESS.

FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

## REYNOLDS'

Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

127 of these Invaluable Machines,  
ARE NOW IN USE  
In California and Nevada Territory, giving a perfectly  
regular motion and  
Saving 20 to 65 per cent of the Fuel.

### Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act  
and least liable to get out of order of any Governor in use.  
It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.

### Clark's Steam and Fire Regulator,

For controlling the Heat or Blast by opening the Chimney  
or Valve in the Blast Pipe by the pressure of the  
steam in the boiler. It will regulate the pressure to a  
point on the square inch. It cannot get out of order  
and any person can put one up in an hour after the damper  
is put in.

### Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the  
common reamer, and when small holes are wanted, it  
can be done four times as fast. The handle can be worked  
in any direction.

### Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.  
Steam Engines, Boilers, Pipes,  
Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.

### Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury  
to the iron. In use for the past EIGHT years.  
Refer to—Sug at Reinery, San Francisco,  
Cottell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.  
E. T. STEEN AGENT.  
No. 33 Fremont Street, San Francisco.

## MOYNIHAN & AITKEN,

### Boiler Makers and Blacksmiths,

Mission, between Beal & Fremont Sts.,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed  
at the shortest notice, and on the most reasonable  
terms. Jy 29

## PUMPS!

### HARRISON'S

### California Lift and Force Pump,

WITHOUT VALVES OR PACKING.

Suitable for Mines, Fire Engines, Wrecking or Irrigation.  
This is the Cheapest, Lightest and most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

ALL SIZES;

Capable of throwing from ONE HUNDRED to FIVE  
THOUSAND Gallons per Minute—For sale by

### C. H. HARRISON,

PHOENIX OIL WORKS,

10-16 517 Front Street, San Francisco.

### 50 lbs. MARINE and

### Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL  
Works in this city, for Hulls and Decks of Vessels  
from ground Mineral Rock contains Arsenic, Copper, Li-  
tharge and six other Minerals. When used on the Decks  
or Bottoms of Ships, it is equal to a coat of Stone, and  
quite equal to Copper, no worms will ever effect it, and  
cheaper than any other paint.

#### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur,  
three parts Mineral Paint, mix with Coal Tar and apply  
it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes  
of 50 lbs. each, or by the Pacific Metallurgical Works.

### 25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal  
to covering them with a coat of Stone, being perfectly  
Fire Proof, and costing less than any paint.

#### DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part  
white lead, thin with Linseed oil: if a lighter color is  
wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white  
Lead, mix with Linseed oil. Put it thick on a tin Roof  
as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. Forquet, Superintendent.  
WORKS, North Beach; Office, 509 Sac-  
ramento st., San Francisco.

## PALMER, HANSCOM & CO.,

### GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

### GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

### To Quartz Miners.

Knox's Improved  
AMALGAMATING PAN,  
WITH

### PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST  
complete amalgamation of the precious metals of  
any process now known.

By it steam is introduced in the most efficient and eco-  
nomical manner, while it is peculiarly adapted to the  
catching of floating gold and silver, known to be other-  
wise lost. Made exclusively by

PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

JOHN P. GALLAGHER.....JOSEPH H. WEED.

## GALLAGHER & WEED,

### BRASS & BELL FOUNDRY

AND

### LOCK FACTORY.

No. 125 First Street, opposite the Minna, next door to Pacific  
Foundry, all kinds of

Brass and Composition Castings and  
Finishing, done with neatness and  
dispatch.

CHURCH and STEAMBOAT BELLS, OF ALL SIZES  
Made to order. Engine's Gongs made and hung  
in the best manner. Banks, Vault, Store and Prison  
Locks, also Brass Padlocks and Shop Locks of various  
patterns, on hand and made to order.

Particular attention given to casting Rudder Braces  
and Ship Work in general.

All Jobs promptly attended to.—Prices  
moderate.

Removed from Oregon street, between Front and Davis.

## Miners' Foundry

—AND—

## MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHI-  
nery, the Best and Most Economical, manufactured  
in the state of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:  
Steam Engines and Boilers, Flour, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgama-  
tors and Water Wheels—some in operation and on exhibi-  
tion.

\*Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.

All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING

San Francisco, February 23, 1863.

## San Francisco Machine

....AND....

## IRON WORKS!

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON  
at reasonable terms.

Steam Engines, High and Low Pressure: Quartz  
mills, Saw mills, Mining Pumps, Hoisting machines for  
mining purposes, Wine Presses, Agricultural implements  
etc., etc. and Castings of all descriptions made to order.  
Steam Engines exchanged and for sale by  
DEVOR, DINSMORE & CO.

REPAIRING promptly attended to.

FOR SALE.

San Francisco, July, 1863.

Jy 13

## VULCAN IRON WORKS COMPANY

P. Torquet, Manager,

### STEAM ENGINE BUILDERS

and

### BOILER MAKERS,

### Iron Founders and General Engineers,

No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing  
Machinery.

Shoes and Dies of the hardest iron,  
Rus-k-iron Punched Screens.

Steamboat Machinery: Saw, Flour and Sugar Mills.  
High and Low Pressure Boilers of all Styles.

Josval and other Turbine Water Wheels with latest  
improvements.

## W. T. & J. GARRATT,

### City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE  
and Lift Pumps, Church and Steamboat Bells, Tay-  
ern and Hand Pumps and Gongs, Hose and all other joints,  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PIPES and NOZZLES for MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.,  
COUPLING JOINTS of all sizes. Manufacturers of "Gar-  
ratt's Patent Improved Journal Metal."

## D. MORRIS, MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

### WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of  
Repairing done at moderate prices. Jy 13

## LEWIS COFFEY AND RISDON,

### STEAM BOILER AND SHEET IRON

WORKS.

The only exclusively Loller Making Establishment on  
the Pacific Coast owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing  
of Old Work, executed as ordered, and warranted as  
to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON.

## THEODOR KALLENBERG

### Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophi-  
cal Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to  
No. 418 Market street, San Francisco.  
n7.3m)

## HIRAM WRIGHT,

### PICK MAKER,

at

### MINER'S PICKS,

Has established a Manufactory for the Making of

NO 121 BUSH STREET, SAN FRANCISCO,

[Between Sansome and Battery.]

Where can be had a superior Pick for Miners use  
As he manufactures all his picks under his own personal  
supervision, he warrants them as being made of the  
best material and by the best workmanship.

Orders attended to and filled promptly and with dis-  
patch. aug 17

### WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established him-  
self in San Francisco, for the manufacture of every  
description of PICKS, of the best material, at reduced  
prices. Free Trials of the best kind furnished in any quan-  
tity, at low rates. Orders from the country promptly  
attended to. N. B.—None genuine unless stamped with  
my name.  
JOHN WRIGHT, 511 Market street,  
Opposite Battery, San Francisco

## CALIFORNIA TOOL WORKS!

### John Weichhart,

Manufacturer of

### All Kinds of Edge Tools, Etc.,

Plane Irons

Moulding Irons,

Stone Cutter's Tools, etc

No. 22 Fremont street, bet Market and Missio  
San Francisco, July 14, 1863.

PATENT CLAIMS.—We will furnish, on application, the  
claim of any invention that has been patented within the  
last fourteen years. The name of the patentee—date  
of patent, when known, and two dollars for copying  
should be sent.

MODELS.—Inventors will please attach to all model  
sent to us, their names and address, in a legible, per-  
manent form, this will avoid confusion and prevent  
errors.

DRAWINGS.—We have highly talented and efficient  
draughtsmen, by whom drawings of every description  
are executed in the best style of art, with promptitude,  
and at a moderate cost.

## WANTED

By a competent person, the Secretaryship of four  
Mining Companies. Books to be kept at the Office of the  
Mining and Scientific Press, No 67 Government House.  
Inquire as above. oct 6

## SOUTH PARK

### Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASON-  
able rates, and Working Assays made of small  
lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO.,  
Office in Shiel's Block, opposite Masonic Temple,  
Jy 13 W. R. WATERS Secretary,

## W. W. HANSCOM,

### Steam and Mechanical Engineer,

Designs furnished, and Drawings made for  
Engines, Mills, Water Wheels, Mining Ma-  
chinery, etc., &c.,  
At Golden State Iron Works,  
aug x First Street, San Francisco.

## Eye, Ear and Throat.

## DR. DE CASTRO,

### Oculist and Aurist,

WHO HAS PRACTISED IN NEW  
York and all the principal cities of Europe with  
such unrivaled success, and from each place is in pos-  
session of the most eminent testimonials, may now be con-  
sulted upon diseases of these delicate organs, with a view  
to their permanent cure. Diseases of long standing thor-  
oughly cured. The Doctor employs his (by the Medical  
Society of London approved)

## Self-adjusting Artificial Tympanum,

For the relief of deafness, attended by loss or injury of  
the membrane tympani, and for the cure of discharge  
from the ear—the invention of Dr. Castro, M. D., author  
of "Deafness Practically Illustrated as to its Nature and  
Treatment," etc.

The self-adjusting Artificial Tympanum was first intro-  
duced to the notice of the profession at the meeting of the  
Medical Society of London, on the 20th of November,  
1862. An animated discussion ensued on the reading of  
the paper, and several members of the Society bore testi-  
mony to the success of the remedy and the importance of  
the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-  
Adjusting Artificial Tympanum, as he had observed the  
immense benefit a young lady friend of his had received  
from it. She was in fact, quite deaf, and in a most mis-  
erable state; the effect of the tympanum was instantaneous—  
quite like a miracle. Five more testimonials from  
Members of the Medical College, New York, and the prin-  
cipal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and  
Kearny streets. Entrance on Market street.

Mr. Editor—Having been afflicted  
with deafness for the last two years, originating from a  
severe cold, and for the last month suffering from the  
most excruciating pains in my ear, I was obliged to come  
down to San Francisco to seek relief. After a physician's  
recommendation to wait on Dr. De Castro, on the corner of  
Kearny and Market streets, and underwent one operation,  
and it is with the utmost pleasure I can say my hearing  
was suddenly and without pain entirely restored. I deem  
it my duty to make this known to the public, and to recom-  
mend Dr. De Castro's skill as an aurist.

JOHN REESE, Napa Valley.

James Callaghan, witness,  
San Francisco, Ju'y 30th., 1863.

[From the Daily Alta.]

San Francisco, June 30th., 1863.

ED'S DAILY ALTA:  
Permit me through your widely circulated journal, to  
say, that my daughter Mary Ellen, has been afflicted with  
deafness since she was thirteen months old, and that she  
has been a number of the best and best justified since  
it was organized. On taking her to Dr. De Castro, on the  
corner of Kearny and Market Streets, and undergoing un-  
der his direction, two operations, she has heard sounds  
very distinctly; and is now, I am happy to state in a fair  
way to get permanent relief. The result, thus far, is sat-  
isfactory; and I deem this notice due to Dr. De Castro for  
his skill; and would recommend all parties similarly af-  
flicted to give him a trial. My daughter has at different  
times been under the care of the most skillful physicians  
and aurists in California, but up to the period of visiting  
Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT,  
812 Green Street.



**KUSTEL & DEETKEN'S**  
**METALLURGICAL WORKS,**  
 FOR THE REDUCTION OF  
**SILVER AND GOLD ORES,**  
 Tailings, Sulphurets, Arsenurets, Etc., Etc.,  
 Cupellation and Refining of Silver and Gold,  
**Practical Assays for Silver and Gold,**  
 In Small and Large Quantities, by Smelting, Chlorination  
 and Pan Manipulation.  
 WORKS—On the San Bruno Road,  
 OFFICE—No. 603 Montgomery st, San Francisco.  
 nov 7 ff.

### HEPBURN & PETERSON'S AMALGAMATOR.

The subscribers would call the attention of the Mining Public to their Reducer and Amalgamator, and also to their Separator for reducing and separating the mineral from

#### GOLD AND SILVER ORES,

manufactured and exhibited at the Vulcan Iron Works, Nos 137 and 139 First street, San Francisco.

These machines secure to the miner a more expeditious and perfect Reduction and Amalgamation, a less liability to accident and delay, and a greater amount of useful effect in proportion to the power employed to keep them in operation than any other machines now in use for producing similar results. This fact is attested to by their general adoption and preference at all the principal Reduction Works in Nevada Territory; among which may be mentioned the Gould & Curry Mill, Pioneer Mill, Eastern Slope Mill, Phoenix Mill, etc.  
 nov 8 San\* HEPBURN & PETERSON.

#### MINING NOTICES.

**Anderson Copper Mining Company.**  
 Notice is hereby given that at a meeting of the Board of Trustees of the Anderson Copper Mining Company, held at their office, No. 528 Montgomery street, San Francisco, October 1, 1863, an assessment of twenty cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to T. LYONS, Superintendent, Copperopolis.  
 By order of the Board of Trustees.  
 oct12 M. G. ELMORE, Secretary.

No. of Shares,	Am't due.
J. C. McClung.....	175 36.25
E. R. W. Bow.....	200 30.00
Thomas Kyle.....	200 30.00
E. A. Morse.....	200 40.00
Edward Bannan.....	100 30.00
Wm. McDonald.....	200 40.00
M. De Young.....	15 75
F. R. Mitchell.....	26 3.75
W. Wilmut.....	20 2.00
J. W. Sheppard.....	10 1.50
J. C. Clark.....	75 5.00
J. C. Ring.....	40 2.00

By order of Board of Trustees. I. C. PRAY, Sec'y.

#### NEW MINING AGENCY.

WE HAVE MADE ARRANGEMENTS WITH A SPECIAL Correspondent at Austin, Reese River, by which any information attainable with regard to any particular mine in that locality can be obtained, for the Private Benefit of Parties

in this City or elsewhere. Our correspondent will visit any mine which may be designated and report upon the general characteristics and condition of the same, the amount of work which may have been done, etc. A reasonable fee will be required for such service. For further information apply at this Office.

EWER & SMITH.

WM. H. MEAD. THEODORE VAN TASSEL.

### MEAD & VAN TASSEL, HATTERS,

Montgomery st., cor. of Commercial,  
 SAN FRANCISCO.

TO OUR FRIENDS AND THE PUBLIC GENERALLY.  
 Having Purchased the entire interest of Messrs FISHER & Co., in this city, we shall, on the 1st day of May assume the management of the

#### HAT EMPORIUM,

so long conducted by that firm.  
 Mr. WILLIAM H. MEAD, for the last seven years Salesman with Messrs Fisher & Co., respectfully solicits a continuance of the patronage so long and liberally bestowed upon the old House, feeling entire confidence in our ability to suit in every particular.

Mr. THEODORE VAN TASSELL, for eight years with Messrs Le Gay & Co., would be pleased to see his friends at his new place of business.

The long practical experience of Messrs Mead & Van Tassel in the Trade justifies them in saying that their work cannot be excelled either in finish or durability. Having perfected arrangements, we shall be in constant receipt, by every steamer of soft goods of the very finest French and American Manufacture.

Our Stock now on hand is superb,  
 Call and examine, and judge of the merits of our claim to the title of "LEADERS OF FASHION."  
 Respectfully,  
 MEAD & VAN TASSELL.  
 nov2 Montgomery street, cor. Commercial,

#### MINING NOTICES.

**May Flower Gold and Silver Mining Company.**  
 At a meeting of the Board of Trustees of the above Company, held October 30th, 1863, an assessment of twenty-five cents per share was levied upon the capital stock of said Company, payable in United States gold coin to the Secretary at the office of the Company, No. 9 Express Building, Montgomery street.  
 S. N. BISHWORTH, Secretary.  
 San Francisco, October 31st, 1863.

**Pioneer Cose Gold and Silver Mining Company, Cose District, Tulare County, Cal.**  
 Notice is hereby given that in accordance with the laws of the State of California, and an order duly made by the Board of Trustees of the Pioneer Cose Gold and Silver Mining Company, there will be sold at public auction, at the sale-room of Jerome Rice & Co., No. 327 Montgomery street San Francisco, on WEDNESDAY, the second day of December, 1863, at 11 o'clock A. M., so many shares in the capital stock of the above named company, standing in the names of the following persons, as will be necessary to pay all assessments now due on said stock, together with all expenses of advertisement and sale, unless sooner paid:  
 J. W. Basford, 100 shares, \$25; T. J. Brother, 165 shares, \$41.25; J. S. Brownlee, 15 shares, \$3.75; J. N. Brown, 18 shares, \$4.50; G. H. Butcher, 100 shares, \$25; B. M. Barker, 91 shares, \$22.75; E. W. Chase, 34 shares, \$8.50; J. C. Smith, 69 shares, \$17.25; A. R. Caldwell, 260 shares, \$65; J. M. Douglas, 20 shares, \$5; J. H. Earle, 63 shares, \$15.75; J. L. Garney, 75 shares, (assessments Nos. 1 and 2) \$56.25; J. N. Garthwait, 25 shares, \$6.25; T. V. Hamilton, 10 shares, \$2.50; D. F. Hughes, 75 shares, \$18.75; Geo. H. Hare, 143 shares, \$35.75; H. Kent, 16 shares, \$4; H. C. Kinyon, 25 shares, \$6.25; M. H. Lisk, 25 shares, \$6.25; M. Leland, 20 shares, \$5; L. Lyon, 20 shares, \$5; S. Levy, certificates Nos. 34 and 37, 10 shares, \$2.50; Levy & Bro., 10 shares, \$2.50; J. R. Lowe, 50 shares, \$12.50; W. L. Luckett, 25 shares, assessment Nos. 1 and 2, \$18.75; S. B. McKee, 10 shares, \$2.50; McGowan, 20 shares, \$5; J. S. Robinson, 62 shares, \$5.50; Wm. Redding, 50 shares, \$12.50; H. Kachel, 10 shares, \$2.50; C. T. Ryland, 40 shares, \$10; F. Stock, 25 shares, \$6.25; J. C. Smith, 69 shares, \$17.25; H. C. Van Dalsen, certificate No. 86, 6 shares, \$1.50; T. W. Weikend, 24 shares, \$6; C. B. Younger, certificates Nos. 90, 224 and 226, 28 shares, \$7.

J. S. LUTY, Secretary,  
 305 Montgomery street, S. F.  
 San Francisco, October 30, 1863. nov2 fm

**Emmet Copper Mining Company.**  
 Notice is hereby given that at a meeting of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No. 528 Montgomery street, San Francisco, October 1, 1863, an assessment of twenty cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to T. LYONS, Superintendent, Copperopolis.  
 By order of the Board of Trustees.  
 oct12 M. G. ELMORE, Secretary.

**Ruth Windsor Tunnel Company, Esmeralda district.**  
 Notice is hereby given that an assessment of fifty cents per share was levied on the capital stock of the above company on the 21st day of September, 1863, payable immediately to the Secretary at his office in United States gold coin.

By order of the Trustees.  
 T. L. Bibbings, Secretary, 305 Montgomery St.  
 San Francisco, October 13, 1863.

#### Minning Shares For Sale

BY  
 O. A. CRANE,

Office 28 Government Block.

475 Shares U. S. Mining Company, Virginia City.  
 910 Shares Granada Gold and Silver Mining Company Virginia Hill, Virginia City.  
 168 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.  
 20 Shares Mohave Mining Company, La Paz District, Colorado, N. M.  
 30 Shares Aspiowall Gold and Silver Mining Company, Devil's Gate District, N. T.  
 75 Shares Washington Copper Mining Company, Indian Bar, Tuolumne Co.  
 225 Shares Montezuma Gold and Silver Mining Company, Inyo District, Tulare Co.  
 90 Shares Owen's County Consolidated Gold and Silver Mining Company, Inyo District, Tulare Co.  
 50 Shares Crown Point Ravine Gold and Silver Mining Company, Virginia District, N. T.  
 10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California.  
 sep28

**Heyer Bros.,**  
 76 and 78 Federal Street,  
 BOSTON.

**Heyer Bros.,**  
 406 Battery Street  
 SAN FRANCISCO.

#### HEYER & CO.,

IMPORTERS OF

#### AMERICAN AND EUROPEAN

Fancy Goods, Toys & Musical Instruments; also,

SOAPS, PERFUMERY, HAIR AND TOOTH BRUSHES, Port Folios, Portmonnaies, Ladies' Bags, Photograph Albums, Cutlery, Willow and Paris Ware, Children's Carriages, etc., Our Stock of Goods in Gold and other Strings is very large. Our Foreign Goods are selected by one of the firm, and the American by the Boston House (established 1824). We have the Sole Agency for

Hallet & Davis' Boston Pianos,  
 Smith & Bros' Harmoniums, and  
 Treat & Linsley's Melodions.

The Hallet & Davis Pianos are each supplied with their Patent Suspension Bridge, which is a decided improvement. It gives a full and clear vibration in the upper octaves, producing a quality of tone unequalled in firmness and purity. Our Melodions and Harmoniums are of the best quality, and warranted to give satisfaction. 3m

#### MINING CARDS.

### OWEN'S RIVER CANAL COMPANY.

Capital Stock ..... \$1,000,000.

10,000 Shares ..... \$100 per Share.

A Portion of this Stock is no offered to the public, and recommended as an investment.

#### FULL PAID AND UNASSESSABLE

Stock, also Assessable Stock, can be obtained of A. J. DOWNER & CO., the authorized Agents of the Company, 406 Montgomery street.

President.....R. S. WHIGHAM.  
 Secretary.....V. FISK BISHOP.  
 Treasurer.....MONTGOMERY COPLY.  
 Superintendent.....WILLIAM FLEMING.  
 Engineer.....J. E. CLAYTON.  
 TRUSTEES:  
 R. S. WHIGHAM, formerly of Whigham's Mill, Nevada City.  
 WILLIAM FLEMING.....of San Francisco.  
 SPEER KIDWELL.....Paying Agent of Parrott & Co's.  
 ISAAC SWAIN.....of A. J. Downer & Co.  
 WILLIAM P. PRATT.....of Nash & Fogg.  
 Office of Company 328 Montgomery street  
 28-sep

JOHN ARMSTRONG. WM. P. WILDER.

### ARMSTRONG & WILDER,

VIRGINIA CITY, N. T.,

#### SEARCHERS OF RECORDS

for Mining Claims & Real Estate.

#### RELIABLE ABSTRACTS

guaranteed at reasonable prices.

#### LETTERS OF ENQUIRY

promptly answered.

#### ALEXANDER STOTT,

#### MINING SECRETARY,

512 Sansome Street, San Francisco.

Secretary of—  
 HORSE SHOE, Silver and Copper, Monte Diablo.  
 DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
 GENERAL JACKSON, Gold and Silver, Devil's Gate.  
 FIGARO, Gold and Silver, Alpine District. au10

### T. C. Sanborn & Co.

#### STOCK BROKERS,

No. 630, MONTGOMERY STREET.

OPHIR SILVER MINING STOCK,  
 GOULD & CURRY MINING STOCK,  
 CHOLLAR MINING STOCK,  
 CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
 BOUGHT & SOLD.

J. F. MILLER. W. C. COLEY.

### MILLER & COLEY,

#### Stock Brokers & Mining Agents

327 MONTGOMERY STREET,

Between California and Pine, in Jerome Rice & Co's Real Estate Sales Rooms, San Francisco.

ALL KINDS OF STOCK AND MINING Business attended to with Promptness and Dispatch  
 aug17

#### L. F. LELAND,

#### STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board  
 je29

#### AGENCY

For the Purchase and Sale of

### MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.  
 je13 WM. FAULKNER.

### New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

#### SHEATHING COPPER;

#### BRAZIER'S COPPER;

#### COPPER BOLTS;

#### YELLOW SHEATHING METAL;

#### COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.  
 je29 108 Front Street, San Francisco.

#### BUSINESS CARDS.

### A. C. MORSE,

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

#### HAVING MADE ARRANGEMENTS

with MINER S. MARIN ESQ., one of the principal

Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

#### Fire Hose! Fire Hose!! Fire Hose!!!

J. P. D. WILKINS,

The celebrated HARNESSE MAKER of Stockton, makes

Fire Hose from the best material, and WARRANTS at

a trial of the Weber Steam Engine Co., No. 3, of the city

of Stockton. This Hose is manufactured at his establishment, and known to stand a pressure of 125 pounds to the

square inch; as certified by the Chief Engineer.

#### ALSO FOR SALE,

All kinds of HARNESSE and SADDLERY, at the lowest cash

prices. Repairs done promptly, one door west of the

Main Street Stable. oct12

#### WANTED,

#### GOLD QUARTZ SUITABLE FOR

#### CUTTING JEWELRY,

By FRONTIER A. DEVIERY,

au31 437 Pine street, San Francisco.

### THE EUROPEAN

#### ORE REFINING

#### COMPANY.

Quartz Mill and Furnaces, Bryant Street,

Crossing Third, San Francisco.

RECEIVE ALL KINDS OF

#### ORES AND MINERALS.

In large or small quantities, for such Experienced Treat-

ment by the

#### LATES EUROPEAN METHODS,

As may be ascertained by

#### CAREFUL ANALYSIS,

At their works, to be the most Effectual in obtaining re-

liable results, and afterwards converting whatever pre-

cious Metals they may contain, into marketable Ingots.

es The South Park, and Folsom and Kearny street Curs

pass Bryant street. au31

### The Pacific Mineral Company

#### MAKE LIBERAL ADVANCES UPON THE ORES OF

COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,

LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined

with Silver and Copper Ores, and advances made there-

for.

Parties owning undeveloped mines and desiring capital

to prospect the same will receive assistance, if, upon ex-

amination, such leads are deemed sufficiently valuable

to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,

je1-tf Montgomery Street, S. Francisco.

### MARTIN & Co.,

OFFICE—224 Montgomery Street, Up Stairs,

#### WILL CONTRACT FOR THE

#### Purchase of Copper Ores,

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN

and NICKEL.

Sacks will be furnished and Freight Paid on all con-

signments if desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,

New York. San Francisco.

San Francisco Post Office, Box 1259.

je 1.

### NORTH BEACH QUARTZ MILL

#### and

#### REDUCTION WORKS

Are prepared to work Gold and Silver ores, in large or

small quantities.

Working assays made of small lots, and all kinds o

ores crushed at short notice.

Our new and complete Machinery, will enable us to

give results fully up to the merits of rock.

WHEELER & THAYER, Proprietors.

C. C. JONES, Amalgamator

San Francisco, Oct. 13, 1863.



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VII. SAN FRANCISCO, MONDAY EVENING, NOVEMBER 16, 1863. NO. 3.

## ROCK DRILLING BY MACHINERY.

The production of a reliable and practical Rock Drilling Machine has long been considered a most important desideratum. Even in the Atlantic States the demand for a machine of this description in running railroad tunnels, in removing ledges, in the process of grading railroads, etc., has long been urgent, and has prompted numerous inventors to try their ingenuity in this direction. Attempts have been made to devise machines for boring out the entire diameter of the tunnel by ingeniously devised cutting instruments, but without achieving any practical success. Other attempts have been made to work smaller borers, on similar plans, so as to reduce the ledge or face of the tunnel to a honeycomb condition, in which it could readily be knocked away by hammers, etc. All these experiments have proved failures at the expense of enormous sums of money, from the fact that too much was attempted, and quarrymen, miners and others interested had pretty much settled down into the conviction that, while almost or quite every branch of human labor might be aided more or less by machinery, the common hand, or churn drill would have to continue to all time as the only method by which men could work their way into the solid rocks which comprise such a vast proportion of our mundane sphere.

It was just at this point, however, that a couple of ingenious Yankees concluded "it would never do to give it up so," and resolved, each unknown to the other, that if a whole loaf was unattainable, a half of one might be better than no loaf at all; so they each set their wits to work to devise some method for drilling the holes merely, still employing gunpowder, as heretofore, as the chief agent, for removing the rock. The idea was a most happy one, for really the chief labor lay in this very work of drilling—the act of removing the rock by powder, was a small work after the hole was drilled. The wear and tear of metal—the friction and resistance—necessary to be overcome to chip away all, or nearly all the rock in small pieces was quite too much to render any such machinery of any practical value. Well, as we have already said, our two ingenious Yankees went to work and as good luck would have it, the one pitched upon the "churn drill," while the other took the "hand drill," as his starting point.

After some two or three years of careful study and experiment each has brought out what appears to be a most eminently practical machine for rock drilling—the one operating on the principal of the "churn drill" and the other on the "hand drill." The names of these two inventors, who we feel fully convinced have brought out a machine which will soon be acknowledged as of immense practical value to California, are WILLIAM W. DUNN, who may be found at No. 9 Front street, and Mr. J. S. FRENCH, who may be found at the Miner's Foundry, on the same street, in this city.

By one of either of these machines one man may do the work of at least four men in the ordinary way. Mr. Dunn's machine, which operates on the principle of the "churn drill," has already been put to practical test in this State, and certificates of its practicability may be seen as well as the machine itself in operation at his shop, as above. Mr. French's machine operates precisely like the ordinary hand drill—the

blow being given by a hammer, which strikes upon the drill as in ordinary hand use. We shall have more to say of these machines at a future time. In the mean time we would advise all interested in tunnelling operations to call and examine them, as above, and judge for themselves of their practical and comparative merits.

## EL PASO MINES.

Our El Paso Correspondent, "C. W. T.," writes us that the excitement in that neighborhood with regard to the new placer diggings two or three hundred miles to the east of that locality, has drawn away the chief portion of their "hired help," and that the mine proprietors there are left to carry forward their projects as best they can without help. He thinks the mines of that neighborhood will have to lie idle until the "tide turns." Our correspondent has probably seen this witnessed a pretty strong flow of the return tide, from which we presume our El Paso friends will derive some gain in the way of an abundance of labor at a fair rate.

Our correspondent further writes that "a lot of splendid ore goes up this week (Oct. 22nd), from the Yarbrough Company, but their work has closed for a time, and the Superintendent is now going to headquarters to make a new start. The frame work of Messrs. Navbree's arastras has arrived, and in a few days they will see what they can obtain from the Rochester gold lead. Our hopes of El Paso are as strong as ever, but we must wait patiently and bide our time."

THE SAN FRANCISCO DIRECTORY for the year commencing October, 1863. Mr. H. G. Langly, the compiler of the above work, has favored us with a copy, and we esteem it as no ordinary favor. The book is full of valuable information touching every leading interest of our city, and should be in the hands of every business man. The Directory proper contains 455 pages—in addition to which are 131 pages of advertisements made up from the principal business houses of the city. A large, well executed and very full and correct map of the city accompanies the work. The book is from the Press of Town & Bacon, and is a highly creditable specimen of that class of work. We trust the enterprising proprietor will be amply repaid for his well applied industry.

MAP OF EL PASO.—We have received from Mr. W. Holt, the publisher, at 305 Montgomery street, a copy of a New Map of El Paso Mining District. The map embraces the localities of Grape Vine City, El Paso City, Ophir City and the Laurel Hill Mining District. All the principal mines throughout a range of country 25 miles long by 12 broad are distinctly laid down, together with a very distinct representation of the topography of the region. The map is for sale by Mr. Holt.

COPPER INGOTS.—The United States Mining Register published at Philadelphia, in its issue of October 10th., says that copper which in the ingot was quoted that day at thirty-two cents per pound, showing an advance of a fraction over fifty per cent.

GOLD MINING NEAR PLACERVILLE—CORRECTION.—In our notice of mining operations at Poverty Point, near Placerville, in our issue of the 2nd. ult. we were mistaken, with regard to the New El Dorado Co. We remarked that the operations of this company "had been tied up in law for nearly a year." A note from one of the proprietors corrects us as follows:—

"The Company owns four different claims. The one on which work has been suspended is claim No. 3., but the principle one, and by far the richest and most extensive, situated on Clay Hill, near Big Cannon, has been and still is being worked regularly, by the Company. Its prospects are very flattering. It contains four different ledges respectively called, from the color of the surface rock, yellow, white, black and red. A shaft 55 feet deep has been sunk on the red lead, which at that depth presents a solid body of quartz six feet wide, rich in gold uniformly diffused through the rock. The White and Yellow leads have been opened by large cuts, and several hundred tons of rock extracted therefrom, which prospects well. A tunnel has been for some time in progress which is to cut each of these four veins at right angles. The indications are that very rich rock will be struck in this tunnel, which will reach the furthest lead at the depth of about 150 feet from the surface. A mill will be erected near the mouth of the tunnel. The location of these lodes is all that could be desired, being near the flourishing town of Placerville, with an abundance of wood and water convenient. The Harmon lead runs parallel to the veins above mentioned.

THE MECHANICS' INSTITUTE FAIR.—At a recent meeting held at the Mechanics' Institute, the subject of holding an Industrial Fair by that Association next September, was freely discussed. Several of the officers and prominent members took part in the discussion, and stated that from careful investigation they were satisfied that a Fair held by the Institution next September would not only be a pecuniary success, but would tend greatly to stimulate the mechanical interests of the State. The matter was referred to the officers of the Institute, to take initiatory steps in securing private, municipal, or State aid in furtherance of the project, and to report the same to a meeting of the members, to be held on the 20th instant. We trust the project will succeed.

OUR HOME MINES.—The Suburban Mining Company, located near the Mission in this city, has levied an assessment of one dollar per share, for the purpose of re-commencing work on their tunnel. We understand that the prospects of the company are highly encouraging, and that it is the intention of the Directors to prosecute the work of developing their ledge with vigor.

THE GOLD HILL NEWS is the title of a neat and ably conducted daily paper, which has recently been started at Gold Hill, near Virginia City. We recognise in the name of one of its proprietors, a friend of other days, when the printing business in California was but in its infancy. The News is the representative of a most important locality on the Eastern Slope, and we trust it will receive that support and encouragement which it appears so well to merit. It is a most welcome visitor to our table.



## KUSTEL'S PROCESSES OF SILVER AND GOLD EXTRACTION.

Among the items to which we may today call favorable attention is one noticed on page 121. An instance is there narrated which occurred in the author's practice in Mexico. He there states the result, "metallic copper in place of iron" (in barrel amalgamation) "acts with little less energy than the iron, but not reducing the copper and lead chlorides to the metallic state, it renders a very pure amalgam."

Another process to which, however, Mr. Kustel makes some objections in view of the fineness of pan amalgamation, is of interest from its analogy with Patterson's lead process. It is due to Mr. Sutro. Mr. Kustel writes thus:

It is known that the silver amalgam that is obtained in the pan amalgamation, consists of regular crystals which are suspended in the quicksilver. The lead amalgam, on the contrary, is entirely dissolved in the quicksilver when hot. If, therefore, the quicksilver is pressed through a cloth while hot, the dissolved lead amalgam is found in the quicksilver, and the silver amalgam in the cloth. A second filtration of the quicksilver when cold, gives the lead amalgam. The lead contains three or four per cent. of silver.

We intend next week to present some comparative statistics of Californian and Australian pan amalgamators.

## IMPORTANT TO WASHOE OPERATORS.

By a law of Nevada Territory, persons who may have cases for suit in claim for Mining Ground in that Territory, must have their complaints and answers filed before the 21st. of November, inst., or their claims will be forever thereafter barred. Persons who think they have claims for mining ground, now in possession of other parties, and for which they are intending to bring suit, will do well to take notice of this item, or they will lose the opportunity to secure their just rights.

A NOTABLE DEATH.—Oliver Ames, of North Easton, Mass., died at his residence on the 11th. of September last, aged 86. But few men have lived in private life in this country, more universally or more favorably known among the laboring classes than Mr. AMES. He was one of the first among American Mechanics to undertake on anything like an extensive scale, the manufacture of shovels. He began business, when quite young, with limited means, and under circumstances which would have utterly discouraged almost any other man; but by a course of industry, integrity and energy seldom displayed, his business rapidly increased and the reputation of his work excelled that of all others on the continent. Mr. Ames never made a poor shovel. It was our privilege to visit his establishment, and make his acquaintance some 26 years ago. We never met a more unassuming man, or one more beloved or respected by his employees. Even at the time of our first visit, which was often repeated at subsequent intervals, he had acquired a handsome fortune, and entrusted his business mainly to his sons; yet his mode of life was plain and simple. He never, to the time of his death, made any ostentatious display of his wealth. He lived to a good old age, and died, at the close of a well spent life, respected and lamented by all. His life may justly be regarded as an example for every American mechanic.

Among the inventions recently announced is a "ship's berth boat," intended to prevent sea sickness. When used as a berth it accommodates itself to the motion of the vessel after the manner of a mariner's compass. In case of shipwreck, it may be used effectively as a life-boat.

REMARKABLE OCCURRENCE.—A negro cook in one of the regiments on Morris Island lately conceived the idea of making sinkers for fish lines out of the lead around Parrott shot. To this end he placed a shell in a stove and sat down, ladle in hand to catch the molten lead as it fell. Just about the time the lead should have fused, the stove separated into very minute fragments, and the last seen of the smelter was a series of involuntary gymnastics creditable to his agility but unpleasant from their abruptness.

THE BOISE MINES.—Many persons are ignorant of the location of the Boise mining country. They are located about three hundred miles south of east from the Dalles, Oregon; Umatilla and Walla Walla, Washington Territory; and some two hundred and twenty-five miles east of south from Lewiston, Idaho Territory.

STEAMER FOR TAHOE.—John A. Crocker, of Sacramento, is going to Lake Tahoe, to construct a small steamer for navigating that romantic sheet of water.

THE MOUNT DIABLO COAL MINES are now sending to market about 4,000 tons per month, the quality of which is constantly improving; it is now selling by the cargo, afloat, at \$10 per ton. Coose Bay Coal, (Oregon) has been sold at the same price, which is also the present market value of that from Bellingham Bay. The steamer Esmeralda, which tows vessels on the Sacramento river, uses coal from the Mount Diablo mines, which it procures at Antioch. The boat has used this coal for making steam for some time, and its owners have great faith in it. Antioch is the location of the Copper Smelting Works, which are also using the Mount Diablo Coal.

The consumption of domestic coals is constantly on the increase, consumers being driven to its use by the high rates ruling for all other coals and firewood. This latter article is now very scarce and high, and readily commands by the cargo \$10 @ \$12 per cord.

NATIONAL FINANCES.—It has been calculated that the present war imposes an average burthen of \$20 per head upon each man, woman and child in the loyal States. Great as this tax may seem, it is nothing to the burthen imposed upon the people of England during the six or eight years of the Napoleonic war, which was calculated at an annual levy of \$41 per capita, or a little more than twice the tax now resting upon this nation. It should also be borne in mind that the loyal States are now far better able to bear even the burthen which England sustained from 1809 to 1816, than that nation was then, inasmuch as we have now reached a ten fold greater degree of development, in resources and commerce, than Great Britain had fifty years ago. These figures and facts are sufficient to show pretty conclusively the ability of our people to bear the burthen imposed, and the folly of those financial croakers who are predicting anarchy and confusion as the result of our present extraordinary national expenditures. Those who make these predictions, whether among our own people or abroad, understand but little of the character of loyal Americans. The recent elections, even if we ignore all past history, afford abundant evidence that there is no place in all this great republic, for a party which would inscribe upon its banners the repudiation of any engagement necessary to sustain the integrity of our government or the permanency of the Union.

THE DEBT.—It is stated semi-officially that the Government enters upon the third year of the war with a debt of \$1,220,750,000. Acting-Secretary of the Treasury Chittenden is reported to have said, in the course of his remarks to the Ohio soldiers in Washington, about a year ago, that foreign capitalists were beginning to invest extensively in Government securities. In a single day \$350,000 worth of United States bonds were issued on foreign account. The money for the payment of the entire army to the close of November, which the Government now has on hand, was advanced by foreign houses.

FOREIGNERS.—It has been estimated from facts obtained from the census and emigrant reports, that the number of foreigners in the loyal States, at the present time, including the children of foreigners born since the arrival of their parents in this country, exceeds one-third of the entire population of those States. The number of naturalized citizens in the entire Union, it appears from the recent census, is 4,136,000, made up of the following nationalities:—

Ireland.....	1,611,000	Italy.....	10,000
German States.....	1,198,000	Denmark.....	10,000
England.....	430,000	Belgium.....	9,000
English N. America.....	230,000	Poland.....	7,000
France.....	109,000	Mexico.....	7,000
Scotland.....	105,000	Antill s.....	7,000
Switzerland.....	53,000	China.....	5,000
Wales.....	45,000	Portugal.....	4,000
Norway.....	43,000	Russia.....	3,000
Holland.....	28,000	Turkey.....	28,000
Sundry.....	204,000		
Total.....	4,136,000		

CALIFORNIA AND JAPAN.—The New York Stockholder of October 6th., says:—"Parties interested in the trade between California and Japan are in town, looking about for fast steamers. It is proposed to form a line from San Francisco to Japan. The steamers, will naturally, be armed, and will probably be provided with letters of marque by their government, or by the princes of Japan, so as to be available in case of war between Japan and any other nation. In view of the relations between Great Britain and Japan," it adds, "it is hardly probable that our shipbuilders will supply the vessels required."

COPPER.—"We learn," says the Calaveras Chronicle, "from gentlemen who have lately visited the mines in Campo Seco, that the copper mines of that famous district are constantly improving; three of them are raising and shipping the finest quality of ore. Parties are prospecting for lodes in the neighborhood with every probability of ultimate success. It is now pretty generally believed that copper cannot be found near the surface, and companies are sinking their shafts the depth of from one hundred to two hundred feet before they lose confidence in their work. If found, a good claim is a fortune to the lucky miner, and will be a permanent source of wealth to the community. Unlike the early gold diggings, which generally gave out by the time a town had been burned out once or twice, a copper district will warrant business men in putting up fire-proof buildings, and insure permanency to even a California population."

ARTESIAN WELL AT NAPA.—The California Steam Navigation Company are sinking an Artesian well at Napa, for the purpose of supplying their boats at that place with pure spring water for steam purposes. Experience has satisfied the company that the damage to boilers and machinery from the use of the brackish waters of the Bay and rivers is more expensive than the cost of procuring pure water in the manner indicated. The well has already reached the depth of 260 feet, and the company are confident in the belief that they will soon find the desired supply.

LAND AND NAVAL PRACTICE.—It is accounted as a singular fact, (if it is a fact,) as recorded by our Eastern exchanges, that while not a single accident has occurred to the guns on board the Ironsides and Monitors, five of Gen. Gilmore's guns of the same calibre as those used by the navy, have exploded or become damaged since the siege of Charleston began. Experienced naval officers explain this by the fact that the projectiles used by the Monitors were "slashed" or greased before being rammed home.

THE FLUTED NAIL.—The London Builder says a company has been formed to bring into practical use a spiral fluted nail, recently invented in England. They are fluted and twisted in a machine, and are manufactured as cheap as common nails. The holding qualities of the nail are remarkable; no holes are required to be made before driving those of any size, and there is no danger of the board splitting, however near to the edge the nail is driven. The spiral point causes the nail to revolve as it advances, and its tenacity of holding is equal to that of a wooden screw.

PRICES OF COTTON AND COTTON FABRICS.—At a sale of cotton, October 8th, in New York, on Government account, 806 bales of Upland were sold in small lots, at prices higher than have been obtained at any other time since the outbreak of the present war. That which was in good condition averaged from 90% @ 92c. One lot in rather bad order brought 82% c., about the average price of Upland cotton for the year past. The market for cotton cloth, in New York, has recently advanced very materially. Standard sheetings, on the 12th ult., were quoted at 40c. and upwards; standard printing cloths at 17c.; madder prints at 25c., with a light business. Woolens have also advanced, but not in proportion to cotton.

ABOUT 300 men are now engaged in gold mining on the Chaudiere river, near Quebec, C. E. The gold found there is in the form of small pellets, and is very pure; but searching for it is tantalizing. Some men will labor for days without obtaining a single grain, while others will make about \$50 dollars per day.

SEX OF EGGS.—Poultry fanciers have for a long time been endeavoring to find the sex of the chicken that would be produced, by the peculiarity of the egg. Two plans have recently been circulating through the papers: first—rough ends will produce cocks, and smooth ends, hens; second—if the air-bubble is in the center of the end, a rooster, and if at one side, a pullet will be hatched. Chas. H. Graver, a Long Island farmer, who does not take all he sees in print for granted, has experimented with the following result: first—of nine birds hatched from rough end eggs, seven were hens, and two, cocks; second—of thirteen birds hatched from eggs with the air bubble on one side, seven were cocks, and six were hens. So both these theories were upset.



**G. E. MOORE,**  
Assayer and Analytical Chemist,  
No. 612 Sacramento Street,  
HAVING ESTABLISHED A CHEMICAL LABORATORY,  
furnished with every requisite for delicate Analytical  
work, is prepared to execute the Assay and Analysis  
of Ores, Mineral Waters, Guanos, etc., with accuracy  
and dispatch.

REFERENCES:  
Prof. J. D. Whitney, State Geologist, San Francisco.  
Alonzo C. Smith, San Francisco.  
Rath & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento.

sep14

**ASSAYS!**  
Promptness and Accuracy Secured  
By the Use of the Most Improved  
Methods of  
ANALYSIS!  
Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,** (From Europe.)  
24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. jyg  
"HINTS FOR PROSPECTORS" Free by Post.

**RIEHN, HEMME & CO.,**  
**ASSAYERS.**  
Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.  
Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO  
Messrs. F. PARROT & CO., Messrs. ALSD & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.  
CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
Assaying, also in Mineralogy and Chemistry as far as  
required to become a practical Assayer.

**AGENTS WANTED.**  
We want a good Agent in every city, town and settlement,  
on the Coast. Applicants will send their names  
with reference, when specimen numbers of the **Min-  
ing & Scientific Press** will be forwarded to them,  
and their names added to our published "List of Agents."  
EWE & SMITH.

WM. H. MEAD, THEODORE VAN TASSEL.  
**MEAD & VAN TASSEL,**  
**HATTERS,**  
Montgomery st., cor. of Commercial,  
SAN FRANCISCO.

TO OUR FRIENDS AND THE PUBLIC GENERALLY.  
Having Purchased the entire interest of Messrs  
FISHER & CO., in this city, we shall, on the 1st day of  
May assume the management of the

**HAT EMPORIUM,**  
so long conducted by that firm.

Mr. WILLIAM H. MEAD, for the last seven years, Sales-  
man with Messrs Fisher & Co., respectfully solicits a con-  
tinuance of the patronage so long and liberally bestowed  
upon the old House, feeling entire confidence in our ability  
to suit in every particular.

Mr. THEODORE VAN TASSEL, for eight years with  
Messrs Le Gay & Co., would be pleased to see his friends  
at his new place of business.

The long practical experience of Messrs Mead & Van  
Tassel in the Trade justifies them in saying that their  
work cannot be excelled either in finish or durability.  
Having perfected arrangements, we shall be in constant  
receipt, by every steamer of soft goods of the very finest  
French and American Manufacture.

Our Stock now on hand is superb.  
Call and examine, and judge of the merits of our claim  
to the title of "LEADERS OF FASHION."  
Respectfully

**MEAD & VAN TASSEL.**  
Montgomery street, cor. Commercial.

**New Style of Ladies' Buckle!**

**W. BOHM,**  
INVENTOR AND PATENTER.

THE SUBSCRIBER HAVING OBTAINED LETTERS PAT-  
ent from Washington for an improvement in the  
construction of Ladies' Buckles, is now ready to fur-  
nish the same in every variety of style. This buckle  
possesses several very important improvements over any  
other in use.

The invention having been carefully examined at the  
Patent Office, has been adjudged to be a useful improve-  
ment, and Letters Patent have been granted for 17 years.  
It excels all other buckles in

Usefulness, Strength and Appearance.  
The Public is respectfully invited to call and examine  
this Buckle at the Jewelry Establishment of

BRAVERMAN & LEVY,  
621 Washington Street, San Francisco.  
JOSEPH BROTHERS,  
607 Montgomery Street, San Francisco.  
FLOBERG & CONRAD,  
118 I Street, Sacramento.  
Agents for the Patentees.

Every Buckle sold, stamped "W. Bohm," will be  
guaranteed as to its Strength and Durability.  
W. BOHM, Patentees.

## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of the  
most Effective, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
class of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

### METHOD OF CRUSHING ORE.

The BRYAN BATTERY, as now constructed, is believed  
to combine all the improvements which the experience  
of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent, more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1860, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing complete about 8,000 pounds,  
and the Five Stamp about 7,000. The Mortar Bed being  
cast in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co. Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

MANUFACTURED ONLY BY  
**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

nos 125 to 136 First street, and 126 to 144

Fremont street.

## MINING & SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper  
commenced Sept. 11, 1862. It is intended that every  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits,  
together with several original engravings, of new inven-  
tions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietor to spare no pains or expense in making it in-  
teresting and valuable information to any paper yet  
published

### The Inventor!

Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his Patent, the proprietors having had  
great experience as Patent Agents, together with facili-  
ties at Washington that enable them to obtain Patents  
with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its col-  
umns will from time to time contain original engrav-  
ings of new machines and inventions, together with a  
large amount of useful matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.

### The Mining Interest!

Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of Min-  
ing Stocks, new inventions of Machinery adapted to that  
purpose, and of everything generally that may be of ser-  
vice to the Miner.

### To Chemists, Architects and Millwrights.

This journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of infor-  
mation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plan-  
tists will not be neglected, engravings will be given of  
agricultural implements, and the farming interest gener-  
ally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum.]

### Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Ten Copies for Twelve Months, \$30.

Names can be sent in at different times and from  
different Post-offices. Specimen copies will be sent  
gratis to any part of the country.

**EWE & SMITH, Publishers,**  
Room 57, Government House, Corner of Washington  
and Sansome streets, San Francisco.

**I. C. E. KLEPZIG & CO.,**

**GUN MAKERS,**

....AND....

**DEALERS IN GUN MATERIALS,**  
733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the abor-  
est notice.  
Gilding, and also Silver Plating, by E. Ekland. je21

**LEANDER RANSOM,**  
**Civil Engineer**

AND

**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

600,000 ACRES OF STATE SCHOOL  
LANDS.

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE, 328 Montgomery street. oct-3

**D. NORCROSS,**

Masonic Temple, No. 6, Post Street.

**Military Goods of all Descriptions.**  
Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.

aug 17

## PEOPLE'S OPPOSITION Steamship Line!

Special Notice.—The Line have been withdrawn from the Ni-  
caragua Route until further notice.

### GREAT REDUCTION IN RATES!!!

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
J. H. BLETHEN.....COMMANDER  
Will be dispatched for PANAMA  
From Mission street Wharf.  
**FRIDAY, - - - - - NOVEMBER 13, 1862**  
Punctually at 9 o'clock, A. M., on  
Connecting at Aspinwall, by the Panama Railroad, with  
the Splendid Steamship  
**ILLINOIS - - - - - 2500 Tons.**

The Moses Taylor, since her 1st trip has undergone  
the most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins enlarged, refitted and  
repainted throughout—making her accommodations equal  
to any Steamer on the ocean.  
For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

## BOOK KEEPING, Penmanship

AND  
**COMMERCIAL CALCULATIONS,**  
Taught by J. S. LUTY  
**PRACTICAL ACCOUNTANT,**  
305 Montgomery Street, Corner of Pine.

### TO QUARTZ MINERS.

All persons interested in Mining Ma-  
chinery are invited to call at Donahue's Foundry and  
examine my improved Amalgamator. It is unquestion-  
ably superior to anything now known for amalgamating  
Silver and Gold. It works 1000 pounds at a time, and  
will amalgamate over three tons a day. By the motion  
of the revolving muller, the pulp is drawn through its  
centre and passes under it, between the grinding sur-  
faces, to the circumference: from whence it passes again  
over the muller to the centre, through the holes and be-  
tween the grinding surface to the circumference as be-  
fore. Thus a constant circulation of the pulp is kept up,  
bringing the particles of ore again and again under the  
muller, and reducing the whole mass to an impalpable  
powder.

No quicksilver lies between the surfaces to be ground,  
but at the circumference and centre of the pan where the  
metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in De-  
cember last, and all persons are again warned against  
purchasing machines made at the Miners' Foundry called  
"Wheeler's Amalgamator," as they are an infringement  
on my patent, and a suit is now pending in the U. S. Cir-  
cuit Court against the parties infringing. My Amalga-  
mators can be seen running at Donahue's Foundry, where  
all can judge of their operation and the very superior  
style in which they are being manufactured.  
sep21 THOMAS VARNEY.

## PATRONIZE HOME MANUFACTURES!!!

**James Longshore,**  
**Trunk and Valise Manufacturer,**  
307 Sansome Street, under Tehama House. Trunks and  
valises, Wholesale and Retail, Fine Sole Leather Trunks,  
Valises, and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
aug x

**APARTMENTS.**  
FURNISHED APARTMENTS, WITH, OR WITHOUT  
Board, at 1018 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
home will do well to apply. jy6

## FOR SALE.

**PATENT PRESSED RUSSIA IRON MINING PANES,**  
Russia Iron Quartz Screens for Mills;  
Portable Forges; Caudron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipe  
Cooking Stoves and Heating Stoves  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the  
**UNEQUALLED  
MONITOR COOKING STOVE  
Or RANGE,  
FOR HOTELS.**

To which we call particular attention.  
je-28 TAY, BROOKS & BACKUS.



## CALIFORNIA MINING INTERESTS IN NEW YORK.

The New York *Stockholder*, after noticing, at some length the receipt of the first issue of our "Mining Directory," and the accompanying remarks upon the mining interests of the Pacific coast, adds:

"But the remarkable movement of organized capital, now going on in California, is certainly something more than a mere speculation. It answers a public want. Untold riches lie buried in that country; to bring it to usefulness and develop it, organized capital is necessary. The opening and working of our mineral deposits, throughout all the States, are but in their infancy. People will invest more and more their spare money in mining operations, because, in spite of many failures, in spite of fraudulent speculations, they feel that there is a degree of certainty in them, which no other field of industry can afford. With a sufficient capital, with integrity and ability, mining companies cannot fail to be profitable concerns to their stockholders. Patience also, and perseverance, are conditions required to be successful. Some years ago, stocks of some mining companies of San Francisco could be bought for a piece of bread, because, after a small expenditure for development, they were unable to pay any dividends. The original shareholders who got rid of their stock, at that time, were losers of course; but those who purchased stock and kept it have been singularly rewarded for their perspicacity.

There is no speculation having a greater character for certainty than mining operations, provided they are properly conducted. When mines have gone through a process of development to ascertain their value; when indications of a metal in sufficient quantity have been obtained, there is no reason why those mines should not become good and paying dividend concerns. California is too far from the action of our capitalists; but the movement so energetically going on in that State to foster the mining interest, is an indication that large profits await those who will invest their money in nearer States or Territories, for the purpose of developing their mineral wealth. Colorado seems to us the most promising field for New York energy and capital; for we believe that it is destined to repeat the marvels of California, regarded till to-day as the mineral wonder of the world."

**CARELESSNESS IN USING GAS.**—The late unfortunate accident by which a promising and intelligent lad of this city lost his life, should operate as a caution to persons using gas, especially in families where children or domestics, often unused to gas, may have occasion to employ it. Many persons have a habit of lowering the gas light in their bedrooms to a faint et al night. This, to say nothing of its pernicious influence upon the health, may be productive of serious accidents. When the gas is reduced so low, a very slight cause—the buzzing of a fly even—will serve to put it out, and the sleeper is left to inhale a poisoned atmosphere, or to incur the risk of an explosion should any one chance to enter the room with a light. Where gas lights are thus lowered, a glass should always be used as a protection to them. Many fires have occurred in consequence of the dim light, not noticed after sunrise, on the window being opened by the occupant or servant; the curtain is blown against the burner and a fire ensues."

## ESMERALDA STOCK REPORT.

But little business is being done at Anrora in the way of transactions in mining shares, by reason of the great scarcity of money there. The principal transactions are consummated by parties from this city, at a very low figure. Owing to various untoward causes, which will soon cease to exist, many a hard working miner, in that region, has been, or soon will be compelled to part with valuable feet at a sacrifice to supply actual wants.

We notice among the latest quotations, the following:

Twenty shares Western Summit, \$13 bid; 20 shares Lexington, \$15 bid—20 asked; 75 shares Cortez, \$4 asked; 5 shares Utah, \$45 bid—60 asked; 10 Crockett, \$40 bid—60 asked; Ural, \$175 asked; 50 shares Dora d, \$13 bid—20 asked; 10 shares East Del Monte, \$20 asked; 10 shares Mulberry, \$10 asked; 25 shares Fly-Away, \$10 asked; 10 shares Locomotive, \$25 asked; 10 shares Pittsburg, \$15 asked; 75 shares Rosalie, \$4 asked; 10 shares Stonewall, 25 asked; 75 shares Ada, \$2 asked; 200 shares Dashing Wave, \$2 asked; 10 shares Western Tunnel, \$15 asked; 10 shares Clan Alpine, \$4 asked; 25 shares Cortez, 4 asked; 10 shares Durand, \$25 asked; 50 share Gov. Stanford, \$3 asked; 25 shares Napoleon Tunnel, \$5 asked; 50 shares Rosalie, \$4 asked; 25 shares Yankee Jim Tunnel, \$4 asked.

## THE COPPER INTEREST.

One of the most encouraging features with regard to the copper interest is the immunity which, as a general thing, it has thus far secured from the speculative mania which has so completely enveloped everything in the way of silver mining. Holders of copper shares, of real or perspective value, appear to be satisfied with their ventures or investments. *per se*, and seemed to have little care for any speculative operations. Every one who has got a few feet in a developed or highly promising copper mine seems to have arrived at the conclusion that copper is to be the stand-by—the sure thing, for permanent investment; and but few are found in the market with their "feet." The permanency and uniformity of mines of copper are well known, and the fact that but little machinery, and that of the simplest and most inexpensive character, is required to dress and concentrate the ores, which immediately on such preparation have an easily ascertained and standard value, renders it extremely difficult to "operate" in copper. The thousand and one cases of "sharp practice" which are so easily concocted in the development and management of silver mines, are almost universally impossibilities when applied to the baser metal. A copper mine, as a general thing, after the bed of ore is once struck, can be so managed as to very nearly or quite pay the way to its fullest development. The day that a ton of ore is raised to the surface its actual value can be ascertained, and capitalists stand ready to advance very closely approximate to its full worth, and take the ore from the very mouth of the mine. Copper, of all the high priced metals, is the one in which capitalists of either large or small means, can most safely invest, or the miner, with no other capital than stout arms and a willing heart can most conveniently embark.

We continue to hear favorable accounts from old copper localities, and new discoveries are almost daily announced. During the past week we have heard of "most wonderful developments" in Indian Valley, about forty miles northwest of Colusi. It is reported that specimens of almost pure copper are taken from the ground, in large quantities, but a few feet only from the surface. One correspondent says "you can find copper in chunks all over the surface, ranging from 45 to 90 per cent. and the best in the State. Pieces have been found weighing ten pounds, containing nine pounds of copper," and again, "the people from all the surrounding country started of, [for the locality] some in buggies, some on horseback, and some two on a mule."

Again, far to the south, and from near the extreme limit of the copper belt, so far as traced in that direction, we find the following item:—

**COPPER PROSPECTS IN TULARE.**—The copper prospects in the new mines on the Chowchilla, are improving. A specimen, about four ounces in weight, was lately taken from the "Tom Early" vein, completely studded with pure copper.

The Gardiner Company, a few miles above Auburn, have struck a well defined ledge, fourteen inches in thickness, which, it is said, will assay from twenty to thirty per cent.

FROM THE COLORADO we also continue to hear most favorable reports. From a gentleman, skilled in matters, mining and metallurgical, who has recently spent some considerable time in that region, we learn that the fears which have hitherto obtained to some extent with regard to the permanence and reliability of the mines there, are entirely without foundation. He assures us that the copper mines of Colorado present as strong indications of continuity and depth as any other mines in the State, and that the general geological features of the country are as favorable as could be desired. This gentleman has promised us some account of his experience and observations in the Colorado mines. Late letters from that locality state all is prosperity in the mines on the Colorado, and that "new discoveries were of almost daily occurrence. A number of companies were getting out ore for shipment. One or two warehouses are in progress of erection at the La Paz landing. The steamer *Cocopah* was discharging a large cargo of miners' supplies at the La Paz landing, October 22d. She would carry below a number of tons of ore, which had been delivered at the landing by Mr. Tyson for shipment."

Dr. H. T. Stevens, the agent for the Colorado Steamboat Company at Fort Yuma, recently arrived at Los Angeles, reports that the boats, on their last trip up the Colorado, took tools and supplies for twenty companies, who intend opening the different leads along the river, and large ship-

ments of ores will soon arrive in San Francisco from that section.

The ship *Invincible*, which has just loaded at this port for Boston, has a large quantity of copper ore on board.

The ship *Industry*, now loading for Europe has 90 tons of copper ore on board from the Arroyo Seco, a very promising mine, recently opened about three miles from Lone City. This ore is shipped by Wm. Shiels, Esq., of this city. The same company have also sold another lot of similar ore to the Antioch Copper works.

## THE MINING SHARE MARKET.

The Mining Share Market still remains quite active, but transactions are chiefly confined to a few leading shares, most of which are in request at enhanced prices. The recent assessments upon unproductive companies has had the effect to induce many outside holders to close out their investments in that class of stock, often at grievous loss. Speculators in shares, who have been quite generally sorely pressed of late, have also been compelled to part with much of their productive and high priced stocks, to enable them to meet calls for assessments.

With the exception of the more prominent and dividend paying shares, mining stocks are at present unavailable as a basis for negotiating loans. Hence the resort to sales, and the recent activity in stocks, in the face of a very general distrust in that class of investment. This activity has been also due, in no small degree, to the calling in of loans, consequent upon the late action of the bankers, which has precipitated upon the market a large quantity of hypothecated stocks.

The business of the week has been chiefly confined to the Ophir, Burning Moscow, North American, Baltic and Sheba, with little variation from prices of previous week.

The Ophir has been the chief feature of the week. A large business has been done in this stock at greatly fluctuating prices; 948 shares have changed hands. These shares opened the week at \$1430, advanced to \$1630, on the strength of the reported discoveries in the mine, but again weakened and closed at \$1390 bid with sellers at \$1400. Dividends for this month have been sold at from \$30 to \$48, and for three months to come at as low an average as \$29.50 per month.

The editor of the *Prices Current* of the 12th inst. accounts as follows for the recent extraordinary fluctuations in this stock:—

The fluctuations in the stock of this Company are attributable to a variety of causes: First, It has been largely hypothecated. Many of the holders, availing themselves of its acceptability to capitalists as collateral, had borrowed large sums upon the pledge of it, and to a very great extent these loans had been employed in the speculative purchase of other stocks of comparatively little value. The downward tendency of the market, and the general unsaleableness of the stock thus purchased, compelled the parties, when pay day came, to realize upon the Ophir as the only resource. Hence free sales became necessary, and the market was precipitated. In addition to this, it may be stated that a good deal of dissatisfaction has existed with regard to the management of the Company's affairs. Prominent officers in it have been at variance—its expenses have been very heavy—an important suit has terminated unfavorably, and under circumstances adapted to increase any odium that may have before existed against the company. The "Bears" have made the most of all this, adding various embellishments to suit their own purposes.

We have taken some pains to inquire into these matters, and are assured from authentic sources that the mine itself both looks and yields as well as ever, and shows no indications of giving out. The enormous expenses of the last month—some 90,000—compelled the trustees to reduce the dividend below the usual figure; but they do not expect a continuance of this, and they aver that the prospects of the mine under proper management are as good as ever. These views are entertained by many parties who sold out with the intention of reinvesting at lower figures, and have done so, under the impression that the causes at work would force prices to a low point, and that reformation in the management of the Company's business was all that the case required. The annual election of trustees will take place in a few weeks, and in the mean time, the pressure of hypothecated stocks upon the market being over, and the true conditions of things pretty generally understood, the stock has rallied handsomely without reaching the low point anticipated.

Burning Moscow still continues to be the favorite speculative claim, and has been largely dealt in—\$848 shares having changed hands at from \$272½ @ \$325. It is stated that this mine now presents a very favorable appearance, and that a large yield of Bullion may be confidently expected, w



Silver Hill at \$20 ; Ural at \$130 ; Utah at \$48 ; Bamboo \$30, and Esmeralda \$18.

1813.....	5	Hawkeye.....	45	60
us.....	5	Hudson.....	—	..

[illegible]

60 Michigan, 45 per share	30 Sheba 110 per foot
15 North American, 67½ pr sh, r w	10 Sheba, 115 per foot
5 North American, 66 per share	10 Sheba, 120 per foot, br 15
2 El Dorado, 66 per share	20 Burning Moscow, 285 pr fl, b 80
6 Hecla, 66 per share	4 Gould & Curry, 4675 per foot
5 Napaucou (copper), 72½, br 30	10 Feet Ophir Dividend for Nov. 48
10 Wide West, 65, per share	20 Feet Ophir Dividend for Nov. 38
5 Imperial, 200 per share, r w	10 Feet Ophir Dividend for Nov. 39
30 Norton, 8 per share, br 30	12 Chollar, 635 per foot
30 Titex, Esmeralda, 45,	5 De Soto 35 per share
12 Ophir, 1500 per foot	10 Open Sesame, 31½, b 30
12 Ophir, 1450 per foot	10 Buckeye, 14 pr share
2 Ophir, 1400 per foot, a 60	10 Luck y e, 19 per share
12 Ophir, 1400 per foot, seller 30 d.	5 Whitton, S. M., 27 per share
36 Ophir, 1400 per foot.	15 La Providencia, Concha, 3½
108 Ophir, 1400 per foot, r w	50 La Providencia, La Paz, 1½
12 Ophir, 1350 per foot, r w	50 La Prieta, La Paz, 1½



**GREEK FIRE.**—Speaking of the Greek fire with which Gen. Gillmore has been experimenting at Charleston, a writer in an English scientific journal expresses the opinion that the substance "might be so formed that it would actually burn under water." What the English writer thinks "might" be done really has been accomplished at Morris Island; several experiments to test the powers of the fire in that way having succeeded admirably. It was also tried under ground. A can filled with it having been placed in a hole dug four feet deep in a sand hill, and then covered up, the earth being soaked with water and batted hard down upon it. On removing the earth, in the course of a minute or two, the substance was found to have burned itself entirely out.

The writer just alluded to states that Scott, the inventor, offered his discovery to the British Government during the Crimean war, but was so discouraged and disgusted with the "circumlocution management," which it was necessary to go through with, that he withdrew his offer, and finally placed his invention in the hands of the Federal Government.

**MINING AGENCY.**—By reference to our advertising columns it will be seen, that we have made arrangements to obtain special information, through a resident correspondent, with regard to any particular mine at Reese River. Parties in the city about to invest in "feet" in that neighborhood, and not having time or caring to incur the expense of visiting the locality, will do well to avail themselves of the opportunity hereby presented of securing reliable information, previous to investment, at a moderate cost.

Persons already holding "feet" and desirous to learn through a disinterested source the actual condition of the mine in which they may be interested, will do well to embrace the opportunity here presented of securing the desired information.

We shall establish agencies similar to the above in all the principal mining districts, at an early day.

### Giffards Injectors,

FOR SUPPLYING OILERS WITH FEED WATER without Pumps No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODDART, Agent,  
je22 Cor. Pine and Front Sts., San Francisco.

### Owens River Canal Company.

#### FOR SALE.

FOR ACCOUNT OF THE COMPANY, 7,000 SHARES OF the above stock, at \$1 per share. It is obviously presented to the public as the best investment, for the price now offered in this market.

Office of the Company No. 328 Montgomery street.

### New Patent Agency.

WE HAVE CONNECTED WITH THE Publication of the "MINING AND SCIENTIFIC PRESS"

**The Patent Agency Business,** And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency** The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

### FOREIGN PATENTS OBTAINED

By application at this office, Room 57 Government House. EWER & SMITH, Solicitors.

### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

### PATENT RIGHTS.

**Patent Rights Bought and Sold,** At the office of the "Mining and Scientific Press" Agency EWER & SMITH.

### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their inventions illustrated and described in the columns of this paper. Fees of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

### GENERAL NOTICES.



### DR. H. AUSTIN, DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

### DESKS

Office Furniture,  
OF ALL KINDS..... FOR SALE BY

JOHN WIGMORE,

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all Kinds, attended to.

### SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

FREDERICK MANSELL,

MECHANICAL & ARCHITECTURAL

DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar 23 2m

El Paso District, Los Angeles County,

### MINING AGENCY.

C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

LETTERS OF EXCHANGE, containing Revenue or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to. The subscriber has a carefully prepared map, (and specimens) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to J. Burnett, Esq., 425 Davis St., San Francisco Cal. El Paso, June 21, 1863. C. W. TAPPAN, and

R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,

JOB TURNING & SCROLL SAWING.

BRACKETS,

RED WOOD BALUSTERS,

NEWEL AND CEDAR BALUSTERS

for Stairs.

Manufacturers of every description of Oval,

Circular and Square

PICTURE & LOOKING GLASS FRAMES

For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS.

H. C. SONES

### MINING LAWS AND FORMS

JUST PUBLISHED BY H. H. BANCROFT & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon, 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. sep14

H. C. KIBBE,  
MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

### GENERAL NOTICES.

### HAYNES & LAWTON,

IMPORTERS AND DEALERS IN

CROCKERY,

GLASS WARE,

FRENCH CHINA,

Coal Oil Lamps, Table Cutlery

CLOCKS,

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

No. 516 SANSOME STREET

[CORNER OF MERCHANT.]

SAN FRANCISCO.

### WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the said. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of trituration, and in cleaning up. By the introduction of the Separating Pan to follow the trituration this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\*.\* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. sep16-1f ZENAS WHEELER.

Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

### REMOVAL.

**OFFICE OF THE PACIFIC METAL** Surgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day. Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased. COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSLAW, Agent, 509 Sacramento street, near Sansome.

NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Webb,  
SAN FRANCISCO.

GEO. A. MITCHELL.

D. S. HUTCHINSON,

METAL F & HUTCHINSON'S

PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

\$3. Per Dozen!

Large sized Photographs \$3—Extra copies \$1 each. AMBROTYPE in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children. Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

### HOTELS.

International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

FIRE-PROOF BRICK BUILDING.

Most convenient to the Steamer's Landing, Business etc. & Places of Amusement OPEN ALL NIGHT.

City Railroad Cars Pass the Door.

REDUCTION IN PRICES.

Fine Bathing Rooms attached to the Barber Shop Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent Spring Bed and Hair mattresses. The International offers to guests the greatest number and

BEST FURNISHED FAMILY ROOMS;

and sets as good a TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

Tremont House,

418 and 420 ----- Jackson Street,  
[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles, WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL. F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

### THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.

STEPHEN SMITH..... PROPRIETOR.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House Free of Charge.

The House is open all night.

### P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

### FOR PANAMA.

The following Steamships will be dispatched in the month of November, 1863.

Nov. 3d, - - - Steamer Golden Age.

Nov. 13th - - - Steamer St. Louis.

Nov. 23d - - - Steamer Orizaba.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M. PUNCTUALLY.

And connect, via Panama Railroad, at Aspinwall, with steamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidsdorff sts.



# MINING AND SCIENTIFIC PRESS.

FOUNDRIES & MACHINE SHOPS. FOUNDRIES & MACHINE SHOPS.

## REYNOLDS' Patent Cut-Off and Governor, FOR STEAM ENGINES.

127 of these Invaluable Machines, ARE NOW IN USE In California and Nevada Territory, giving a perfectly regular motion and Saving 20 to 65 per cent of the Fuel.

### Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

### Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

### Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

### Felt for Steam Boilers, Pipes, Etc.,

At the lowest market rates.

### Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

### Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years. Refer to—Sugar Refinery, San Francisco, Cottell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States. E. T. STEEN AGENT. No. 33 Fremont Street, San Francisco.

## MOYNIHAN & AITKEN,

### Boiler Makers and Blacksmiths,

Mission, between Beal & Fremont Sts, San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms. Jy 29

## PUMPS!

### HARRISON'S

### California Lift and Force Pump,

WITHOUT VALVES OR PACKING, Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

### ALL SIZES;

Capable of throwing from ONE HUNDRED to FIVE THOUSAND Gallons per Minute—For sale by

### C. H. HARRISON,

PHOENIX OIL WORKS,

1e-15 617 Front Street, San Francisco.

### 50 lbs. MARINE and

### Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels from Ground. Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil. For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

### 35 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

### DIRECTIONS:

HOUSE.—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil; if a lighter color is wanted, mix less paint, more lead.

ROOF.—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years. S. C. BRADSHAW, Agt., G. T. TORQUE, Superintendent.

WORKS, North Beach; Office, 509 Sacramento st., San Francisco.

## PALMER, HANSCOM & CO., GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

## To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be other wise lost. Made exclusively by

PALMER, HANSCOMB & CO.,

GOLDEN STATE IRON WORKS,

No. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. W. A. PALMER.

JOHN P. GALLAGHER.....JOSEPH H. WEED.

GALLAGHER & WEED,

BRASS & BELL FOUNDRY

AND

LOCK FACTORY.

No. 125 First Street, opposite Minna, next door to Pacific Foundry, all kinds of

Brass and Composition Castings and Finishing, done with neatness and dispatch.

CHURCH and STEAMBOAT BELLS, OF ALL SIZES Made to order. Engine's Gongs made and hung in the best manner. Bank, Vault, Store and Prison Locks, also brass Padlocks and Shop Locks of various patterns, on hand and made to order.

Particular attention given to casting Rudder Braces and Ship Work in general.

All Jobs promptly attended to.—Prices moderate.

Removed from Oregon street, between Front and Davis.

## Miners' Foundry

—AND—

MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the State of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING

San Francisco, February 23, 1863.

## San Francisco Machine

....AND....

## IRON WORKS!

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON most reasonable terms.

Steam Engines, High and Low Pressure; Quartz mills, Saw mills, Mining Pumps, Hoisting machines for mining purposes, Wine Presses, Agricultural implements etc, etc, and Castings of all descriptions made to order Steam Engines exchanged for sale by

DEVOE, DINSMORE & CO.

REPAIRING promptly attended to.

FOR SALE.

San Francisco, July, 1863.

Jy 13

FOUNDRIES & MACHINE SHOPS.

## VULCAN IRON WORKS COMPANY

P. Torquet, Manager,

STEAM ENGINE BUILDERS

and

BOILER MAKERS,

Iron Founders and General Engineers,

No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing Machinery.

Shoes and Dies of the hardest iron,

Russia iron Punched Screens.

Steamboat Machinery: Saw, Flour and Sugar Mills.

High and Low Pressure Boilers of all Styles.

Josvat and other Turbine Water Wheels with latest improvements.

## W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Tavern and Hind Bells and Gongs, Rose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, etc.; COUPLING JOINTS of all sizes. Manufacturers of "Garratt's Patent Improved Journal Metal."

## D. MORRIS, MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. Jc 13

## LEWIS COFFEY AND RISDON, STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

## THEODOR KALLENBERG

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and the Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. No. 418 Market street, San Francisco. 07.3m) San Francisco.

## HIRAM WRIGHT,

PICK MAKER,

Has established a Manufactory for the Making of

MINER'S PICKS,

at

NO 121 BUSH STREET, SAN FRANCISCO,

[Between Sansome and Battery.]

WHERE can be had a superior Pick for Miners use As he manufactures all his picks under his own personal supervision, he warrants them as being made of the best material and by the best workmanship.

Orders attended to and filled promptly and with dispatch. aug 17

## WRIGHT'S PICKS.

JOHN WRIGHT, of Sacramento, has established himself in San Francisco, for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. N. B.—None genuine unless stamped with my name. JOHN WRIGHT, 511 Market street, Opposite Battery, San Francisco.

## CALIFORNIA TOOL WORKS!

John Weichhart,

Manufacturer of

All Kinds of Edge Tools, Etc.,

Plane Irons Moulding Irons, Stone Cutter's Tools, etc

No. 22 Fremont street, bet Market and Mission San Francisco, July 14, 1863.

PATENT CLAIMS.—We will furnish, on application, the claim of any invention that has been patented within the last fourteen years. The name of the patentee—date of patent, when known, and two dollars for copying should be sent.

MODELS.—Inventors will please attach to all model sent to us, their names and address, in a legible, permanent form, this will avoid confusion and prevent errors.

DRAWINGS.—We have highly talented and efficient Draughtsmen, by whom drawings of every description are executed in the best style of art, with promptitude, and at a moderate cost.

## WANTED

By a competent person, the Secretaryship of four Mining Companies. Books to be kept at the Office of the Mining and Scientific Press, No 57 Government House. Inquire as above. oct 6

## SOUTH PARK

## Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO.

Office in Shiel's Block, opposite Masonic Temple.

Jc 13 W. R. WATERS Secretary.

## W. W. HANSCOM,

Steam and Mechanical Engineer,

Designs furnished, and Drawings made for Engines, Mills, Water Wheels, Mining Machinery, etc., &c., At Golden State Iron Works,

aug 1 First Street, San Francisco.

## Eye, Ear and Throat.

## DR. DE CASTRO,

Oculist and Aurist,

WHO HAS PRACTISED IN NEW York and all the principal cities of Europe with such unrivalled success, and from each place is in possession of the most eminent testimonials, may now be consulted upon diseases of these delicate organs, with a view to their permanent cure. He has a long standing thorough cure. The Doctor employs his (by the Medical Society of London approved)

## Self-adjusting Artificial Tympanum,

For the relief of deafness, attended by loss or injury of the membrana tympani, and the cure of discharge from the ear—the invention of Dr. Castro, M. D., author of "Deafness Practically Illustrated as to its Nature and Treatment," &c.

The self-adjusting Artificial Tympanum was first introduced to the notice of the profession at the meeting of the Medical Society of London, on the 20th of November, 1861. An animated discussion ensued on the reading of the paper, and several members of the Society bore testimony to the success of the remedy and the importance of the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-Adjusting Artificial Tympanum, as he had observed the immense benefit a young lady friend of his had received from it. She was in fact, quite deaf, and in a most miserable state; the effect of the tympanum was instantaneous—quite like a miracle. Five more testimonials from Members of the Medical College, New York, and the principal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and Kearny streets. Entrance on Market street.

Mr. Editor.—Having been afflicted with deafness for the last two years, originating from a severe cold, and for the last month suffering from the most excruciating pains in my ear, I was obliged to come down to San Francisco to seek relief. After a physician's recommendation to wait on Dr. De Castro, on the corner of Kearny and Market streets, and underwent an operation, and it is with the utmost pleasure I can say my hearing was suddenly and without pain entirely restored. I deem it my duty to make this known to the public, and to recommend Dr. De Castro's skill as an aurist.

James Collaghan, witness, San Francisco, Ju y 30th, 1863.

[From the Daily Alta.]

San Francisco, June 30th, 1863.

DR. DE CASTRO'S: Permit me through your widely circulated journal, to say, that my daughter Mary Ellen, has been afflicted with deafness since she was thirteen months old, and that she has been a member of the Deaf and Dumb Institute since it was organized. On taking her to Dr. De Castro, on the corner of Kearny and Market Streets, and undergoing under his direction, two operations, she has heard sounds very distinctly; and is now, I am happy to state in a fair way to get permanent relief. The result, thus far, is satisfactory; and I deem this notice due to Dr. De Castro for his skill; and would recommend all parties similarly afflicted to give him a trial. My daughter has at different times been under the care of the most skillful physicians and aurists in California, but up to the period of visiting Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT, 812 Green Street.



**Silver Butte Consolidated Silver Mining Company.**—Notice is hereby given that on SATURDAY, December 12th, 1863, at 10 o'clock A. M., there will be sold at public auction, at the office of the Company, so many shares in the Capital Stock of the Silver Butte Consolidated Mining Company standing in the names of the following persons as may be necessary to pay all assessments now due by said parties, together with all expenses of advertising and sale, unless said assessments and charges are previously paid:

Names.	No. Certificates.	No. Shares.	Am't
Beckford, D. R.	278	1	\$ 50
Brauchman, J. H.	229, 140	20	10 00
Dore, B.	279, 276	10	10 00
French, B. F.	192, 193, 194	62	26 00
Johnson, B. R.	78, 78, 79	5	2 50
Johnson, G. H.	64, 54, 56, 57, 144, 145, 146, 253, 260, 261, 192, 193, 194, 196, 198, 197, 198, 199, 200.	54	27 00
Keck, H.	256	125	62 50
Maynard, F. T.	266	4	2 00
Mc Nam, E. D.	121, 122, 266	62	26 00
Mills, A.	293, 291, 265	31	15 50
Manchester, A.	105	6	3 00
Perical, R.	67, 94, 97	5	2 50
Spaulding, G. S.	316, 317, 318	3	1 50
Sproul, J. R.	211	5	2 50
Warfield, J. J.	317	30	15 00

A portion of the above stock has been sold and not transferred. By order of the Board of Trustees.  
M. G. ELMORE, Secretary.  
San Francisco, November 10th, 1863. no16

**GOLDEN AGE G. & S. MINING CO.,**  
Austin, Reese River.  
OFFICE, 57 Government House.  
WM. POOLER, SEC'Y.

**KUSTEL & DEETKEN'S  
METALLURGICAL WORKS,**  
FOR THE REDUCTION OF  
SILVER AND GOLD ORES,  
Tailings, Sulphurets, Arseniurets, Etc., Etc.,  
Cupellation and Refining of Silver and Gold,  
Practical Assays for Silver and Gold,  
in Small and Large Quantities, by Smelting, Chlorination  
and Pan Manipulation.  
WORKS—On the San Bruno Road.  
OFFICE—No. 605 Montgomery st, San Francisco.  
nov 7 tf.

**HEPBURN & PETERSON'S  
AMALGAMATOR.**  
The subscribers would call the attention of the Mining Public to their Reducor and Amalgamator, and also to their Separator for reducing and separating the mineral from

**GOLD AND SILVER ORES,**  
manufactured and exhibited at the Vulcan Iron Works, Nos 137 and 139 First street, San Francisco.  
These machines secure to the miner a more Expeditious and Perfect Reduction and Amalgamation, a less liability to accident and delay, and a greater amount of useful effect in proportion to the power employed to keep them in operation than any other machines now in use for producing similar results. This fact is attested by their general adoption and preference at all the principal Reduction Works in Nevada Territory; among which may be mentioned the Gould & Curry Mill, the Silver State Reduction Works, Yephyr Flat Mill, Pioneer Mill, Eastern Slope Mill, Phoenix Mill, etc.  
nov8 3m\* HEPBURN & PETERSON.

**Anderson Copper Mining Company.**  
Notice is hereby given that on TUESDAY, the first day of December, A. D. 1863, at two o'clock P. M., at the sales-rooms of Jerome Rice & Co. No 327 Montgomery Street, there will be sold at Public Auction, by order of the Board of Trustees of the Anderson Copper Mining Company, so many Shares of the Capital Stock of the said Company, standing on the books in the names of the persons specified below, respectively, as shall be sufficient to pay all assessments levied thereon by the Board of Trustees, which were due and unpaid on the first day of September, A. D. 1863, together with expenses thereon of advertising and sale:

No. of Shares.	Am't due.
J. C. McClung	175
E. B. W. Bow	30 00
Thomas Kyle	200
E. A. Morse	200
Edward Bannan	200
Wm. McDonald	200
E. R. Mitchell	15
M. De Young	26
W. Wilmet	20
J. W. Sheppard	10
J. C. Clark	75
J. C. Ring	40

By order of Board of Trustees.  
I. C. PRAY, Sec'y.

### NEW MINING AGENCY.

**WE HAVE MADE ARRANGEMENTS WITH A SPECIAL Correspondent at Austin, Reese River, by which any information attainable with regard to any particular mine in that locality can be obtained, for the Private Benefit of Parties**  
In this City or elsewhere. Our correspondent will visit any mine which may be designated and report upon the general characteristics and condition of the same, the amount of work which may have been done, etc. A reasonable fee will be required for such service. For further information apply at this Office.  
EWER & SMITH.

### MINING NOTICES.

**May Flower Gold and Silver Mining Company.** At a meeting of the Board of Trustees of the above Company, held October 30th, 1863, an assessment of twenty-five cents per share was levied upon the capital stock of said Company, payable in United States gold coin to the Secretary at the office of the Company, No. 9 Express Building, Montgomery street.  
S. N. BOWORTH, Secretary.  
San Francisco, October 31st, 1863.

**Pioneer Cose Gold and Silver Mining Company,** Coso District, Thirre County, Cal.—Notice is hereby given that in accordance with the laws of the State of California, and an order duly made by the Board of Trustees of the Pioneer Cose Gold and Silver Mining Company, there will be sold at public auction, at the sale-room of Jerome Rice & Co., No. 327 Montgomery street San Francisco, on WEDNESDAY, the second day of December, 1863, at 11 o'clock A. M., so many shares in the Capital Stock of the above named company, standing in the names of the following persons, as will be necessary to pay all assessments now due on said stock, together with all expenses of advertisement and sale, unless sooner paid:

J. W. Balford, 100 shares, \$25; T. J. Brother, 165 shares, \$41 25; Jas. Brownlee, 25 shares, \$6 25; J. N. Brown, 18 shares, \$2 50; G. H. Butcher, 700 shares, \$25; B. M. Barker, 91 shares, \$22 75; E. W. Chase, 34 shares, \$8 50; J. Chapman, 25 shares, \$6 25; A. B. Caldwell, 290 shares, \$72 50; J. M. Douglas, 20 shares, \$5; J. H. Earle, 63 shares, \$15 75; J. L. Garney, 75 shares, (assessments Nos. 1 and 2,) \$66 25; J. N. Garthwait, 25 shares, \$6 50; T. V. Hamilton, 20 shares, \$5; D. F. Hughes, 75 shares, \$18 75; Geo. H. Hare, 143 shares, \$35 75; H. Kent, 16 shares, \$4; H. K. Knapp, 25 shares, \$6 25; M. H. Lark, 25 shares, \$6 25; M. Laird, 20 shares, \$5; L. Lyon, 20 shares, \$5; S. Levy, certificates Nos. 34 and 37, 10 shares, \$2 50; Levy & Bro., 10 shares, \$2 50; J. R. Lowe, 60 shares, \$12 50; W. L. Luckett, 25 shares, assessment Nos. 1 and 2, \$18 75; S. B. McKee, 10 shares, \$2 50; Lee McGowan, 20 shares, \$5; J. S. Robinson, 62 shares, \$15 50; Wm. Reiding, 50 shares, \$12 50; H. E. Rice, 10 shares, \$2 50; C. T. Ryland, 40 shares, \$10; F. Stoddard, 25 shares, \$6 25; J. C. Smith, 69 shares, \$17 25; H. C. Van Dalsen, certificate No. 86, 6 shares, \$1 50; T. W. Wedekind, 24 shares, \$6; C. B. Younger, certificates Nos. 90, 224 and 226, 28 shares, \$7.

J. S. LUTY, Secretary,  
305 Montgomery street, S. F.  
San Francisco, October 30, 1863. nov2 1m

**Emmet Copper Mining Company.**—Notice is hereby given that at a meeting of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No. 528 Montgomery street, San Francisco, October 1, 1863, an assessment of twenty cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to T. LYONS, Superintendent, Copperopolis.  
By order of the Board of Trustees.  
oct12 M. G. ELMORE, Secretary.

**Ruth Windor Tunnel Company, Es-**  
meralda district.—Notice is hereby given that an assessment of fifty cents per share was levied on the capital stock of the above company on the 21st day of September, 1863, payable immediately to the Secretary at his office in United States gold coin.  
By order of the Trustees.  
T. L. Bibbings, Secretary, 305 Montgomery St.  
San Francisco, October 13, 1863.

### Mining Shares For Sale

BY  
**G. A. CRANE,**  
Office 28 Government Block.  
475 Shares U. S. Mining Company, Virginia City.  
910 Shares Granada Gold and Silver Mining Company Virginia Hill, Virginia City.  
168 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.  
20 Shares Mohave Mining Company, La Paz District, Colorado, N. M.  
30 Shares Aspinwall Gold and Silver Mining Company, Devil's Gate District, N. T.  
75 Shares Washington Copper Mining Company, Indian Bar, Tuolumne Co.  
228 Shares Montezuma Gold and Silver Mining Company, Inyo District, Tulare Co.  
90 Shares Owen's County Consolidated Gold and Silver Mining Company, Inyo District, Tulare Co.  
50 Shares Crown Point Ravine Gold and Silver Mining Company, Virginia District, N. T.  
10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California.  
sep28

**Heyer Bros.,** 76 and 78 Federal Street, BOSTON.  
**Heyer Bros.,** 406 Battery Street SAN FRANCISCO.

### HEYER & CO.,

IMPORTERS OF  
**AMERICAN AND EUROPEAN  
Fancy Goods, Toys & Musical Instruments; also,**

**SOAPS, PERFUMERY, HAIR AND TOOTH BRUSHES,** Port Folios, Portunouia, Ladies' Bags, Photograph Albums, Cutlery, Willow and Parian Ware, Children's Carriages, etc., Our Stock of Violin, Guitar and other Strings is very large. Our Foreign Goods are selected by one of the firm, and the American by the Boston House (established 1824.) We have the Sole Agency for

**Hallet & Davis' Boston Pianos,**  
**Smith & Bros' Harmoniums, and**  
**Treat & Linsley's Melodeons.**

The Hallet & Davis Pianos are each supplied with their Patent Suspension Bridge, which is a decided improvement. It gives a full and clear vibration in the upper octaves, producing a quality of tone unequalled in firmness and purity. Our Melodeons and Harmoniums are of the best quality, and warranted to give satisfaction. 3m

### MINING CARDS.

#### OWEN'S RIVER CANAL COMPANY.

Capital Stock ..... \$1,000,000.

10,000 Shares ..... \$100 per Share.

A Portion of this Stock is no offered to the public, and recommended as an investment.

**FULL PAID AND UNASSESSABLE**  
Stock, also Assessable Stock, can be obtained of A. J. DOWNER & CO., the authorized Agents of the Company, 406 Montgomery street.

President.....R. S. WHIGHAM.  
Secretary.....W. FISK HICKCOCK.  
Treasurer.....MONTGOMERY GOLLY.  
Superintendent.....WILLIAM FLEMING.  
Engineer.....J. E. CLAYTON.

TRUSTEES:  
R. S. WHIGHAM, formerly of Whigham's Mill, Nevada City.  
WILLIAM FLEMING.....of San Francisco.  
SPER RIDDLE.....Paying Teller of Parrot & Co's.  
ISAAC SWAIN.....of A. J. Downer & Co.  
WILLIAM P. PRATT.....of Nash & Fogg.  
Office of Company 328 Montgomery street  
23sep

JOHN ARMSTRONG. WM. P. WILDER.

#### ARMSTRONG & WILDER,

VIRGINIA CITY, N. T.,  
**SEARCHERS OF RECORDS  
for Mining Claims & Real Estate.**

**RELIABLE ABSTRACTS**  
guaranteed at reasonable prices.  
**LETTERS OF ENQUIRY**  
promptly answered.

**ALEXANDER STOTT,  
MINING SECRETARY,**  
512 Sansome Street, San Francisco.

Secretary of—  
HORSE SHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

**T. C. Sanborn & Co.,  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.**

**OPHIR SILVER MINING STOCK,  
GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.**

J. F. MILLER. W. C. COLEY.

**MILLER & COLEY,  
Stock Brokers & Mining Agents  
327 MONTGOMERY STREET,**

Between California and Pine, in Jerome Rice & Co's Real Estate Sales Rooms, San Francisco.

**ALL KINDS OF STOCK AND MINING  
Business attended to with Promptness  
and Dispatch**  
aug17

**L. F. LELAND,  
STOCK BROKER,**

No. 621 Clay street,  
Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.  
Member of the San Francisco Stock and Exchange Board  
je 29

**AGENCY  
For the Purchase and Sale of  
MEXICAN MINING STOCKS**

At No. 411 Clay Street, San Francisco.  
OFFICE OF THE PENA AND LA MARRONENA SIL-  
Mining Companies, San Antonio District, Lower California.  
All persons are invited to call and examine Ores from the above mines.  
je13 Wm. FAULKNER.

**New Bedford Copper Company.**  
THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

**SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;**

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.  
MORGAN, STONE & Co  
je-29 108 Front Street, San Francisco.

### BUSINESS CARDS.

**A. C. MORSE,  
Mining and Real Estate Agent,**  
Office—S. W. corner Pine and Silver sts., Aurora.  
**HAVING MADE ARRANGEMENTS**  
with MINER S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

**Fire Hose! Fire Hose!! Fire Hose!!!**

**J. P. D. WILKINS,**  
The celebrated HARNESSE MAKER of Stockton, makes FIRE HOSE, from the best material, and WARRANTED at a trial of the Weber Steam Engine Co., No 3, of the city of Stockton. This Hose is manufactured at his establishment, and known to stand a pressure of 125 pounds to the square inch; as certified by the Chief Engineer.

**ALSO FOR SALE,**  
All kinds of HARNESSE and SADDLERY, at the lowest cash prices. REPAIRING done promptly, one door west of the Main Street Stable.  
oct12

**WANTED,  
GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,**  
By FRONTIER A. DEVIERCY,  
au8f 437 Pine street, San Francisco.

**THE EUROPEAN  
ORE REFINING  
COMPANY.**

Quartz Mill and Furnaces, Bryant Street,  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF  
**ORES AND MINERALS.**

In large or small quantities, for such Experienced Treatment by the  
**LATES EUROPEAN METHODS,**  
As may be ascertained by  
**CAREFUL ANALYSIS,**  
At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.  
The South Park, and Folsom and Kearny street, Cars pass Bryant street.  
au31

**The Pacific Mineral Company**

**MAKE LIBERAL ADVANCES UPON THE ORES OF  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.**  
Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.  
Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-tf Montgomery Street, SLo Francisco.

**MARTIN & Co.,**

OFFICE--224 Montgomery Street, Up Stairs,

**WILL CONTRACT FOR THE**

**Purchase of Copper Ores,**

Assaying 8 per cent and upwards of Copper to the Ton. We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.  
Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

**HENRY MARTIN,** J. F. GREENMAN,  
New York. San Francisco,  
San Francisco Post Office, Box 1259.  
je 1.

**NORTH BEACH QUARTZ MILL  
and  
REDUCTION WORKS**

Are prepared to work Gold and Silver ores, in large or small quantities.  
Working assays made of small lots, and all kinds of ores crushed at short notice.

Our new and complete Machinery, will enable us to give results fully up to the merits of rock.  
WHEELER & THAYER, Proprietors,  
C. C. JONES, Amalgamator  
San Francisco, Oct. 13, 1863.



# Mining and Scientific Press.

W. B. EWER, EDITOR. } A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC. } EWER & SMITH, PROPRIETORS.

VOL. VII. SAN FRANCISCO, MONDAY EVENING, NOVEMBER 23, 1863. NO. 4.

## A PATENT BLASTING LOCK.

In our last issue we made some notice of a recently invented machine for rock drilling. To-day we present the accompanying illustration of a very useful and ingenious little piece of mechanism which may prove a most useful and appropriate accompaniment to a rock drilling machine, and which, in fact, could be employed in all cases where any considerable amount of blasting is required. This instrument is known as "Hughes' Blasting Lock," and sold by Messrs. Hughes & Co., at No. 408 Commercial street, in this city. In order that its utility may be understood, we give the following description of the mode of using it, which will be clearly understood by carefully reading the same in connection with the illustration.

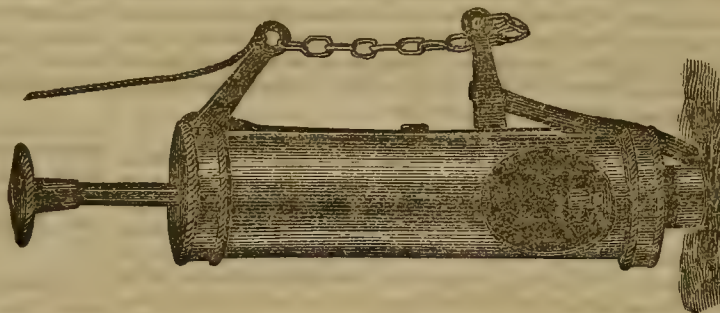
First cock the instrument by pulling the brass knob represented upon the extreme right of the illustration; then put the water-proof cap on the nipple seen in the opening of the cylinder; next cut off the fuse one inch above the surface of the rock in which the blast has been put, and insert the lock into the projecting fuse so that it will enter the muzzle as far as possible; then raise the lower lever till it stands at a right angle with the cylinder. When ready for use the upper lever, which acts as the trigger must always be down on the cylinder. Care should be taken that the chain connecting the two levers, is not kinked or tangled; if it is so, when you pull the cord it will pull the machine loose before the cap is set. If used in a shaft, the upper end should always be at the top, when all is ready, ascend the shaft, or remove to a place of security in the mine and pull the cord. The machine will at the same instant disengage itself from the fuse, to which it had previously been fastened by the upper lever, and should be promptly pulled out of the shaft away from the vicinity of the blast. The lock should always be kept well oiled and the muzzle cleaned like the barrel of a pistol. A single blast or a series of blasts may thus be set off at the same instant.

The advantages of this machine are immunity from danger, great saving of fuse and time, and a greater certainty of discharge from the employment of a shorter fuse. The lock will only fail if ever fails in its duty. In sinking shafts, where blasting is required, the advantage is very important, as will readily be perceived. The machine weighs but a few ounces, and may be readily forwarded by express or mail wherever it may be desired.

**THE COPPER SPECIMEN.**—A very fine Specimen of Copper from the Eureka Company, Nevada county, may be seen at the Express Building, on Montgomery street. The specimen weighs 226 lbs. and was taken from a shaft at the depth of seventy feet, only.

**PAPER VS. GOLD.**—There are 88 banks in Rhode Island, with a capital of \$21,000,000, on a specie basis of a trifle over half a million.

## Hughes' Blasting Lock.



### LETTER FROM REESE RIVER.

AUSTIN, N. T., Nov. 8th., 1863.

**EDITOR MINING & SCIENTIFIC PRESS:**—The Virginia City *Enterprise*, of the 5th inst., gives currency to some ridiculous street rumors, which are calculated and probably intended to deter capitalists from investing in the Reese River mines, and which doubtless originated from jealousy of a growing rival. These rumors are to the effect that loads of silver ore from the Gould & Curry are being shipped to Reese River for the purpose of "salting" worthless claims, and that a large amount of bullion has been purchased at Gold Hill, brought out here and run into bars, and palmed off as the product of these mines. The first of these rumors, the *Enterprise* thinks, is "absurd," for the reason that the ore from the two regions is as much unlike as coal is from chalk, and no man here could be deceived. The Editor, had he been disposed, might have given several much better reasons for discrediting the story. Without doubt there are many worthless claims in the Reese River District, which the owners would be glad to sell; but were they disposed to "salt" them, they could get plenty of good ore for the purpose in their own neighborhood, without going to the expense and trouble of purchasing it in Virginia and paying ten or fifteen cents a pound freight to Austin. The other rumor, the Virginia paper thinks, is more plausible, but viewed in a proper light it is equally as absurd as the first. Our mills, it is true, are not turning out as much bullion at the present time as had been anticipated by those well acquainted with the richness of our mines, but the article can be readily purchased here at a discount of five and six per cent., and a man would be a simpleton to send to Gold Hill for it, where he would have to pay nearly its assayed value.

A reader of the Virginia City papers cannot fail to have noticed that they never omit an opportunity to make a fling at the Reese River mines, while the mines of Humboldt and Esmeralda, when referred to at all, are spoken of in the most respectful terms. The reason is they have well grounded fears that their far-famed Comstock will soon be eclipsed by the rich silver veins of Reese River, while they have no fears of rivalry, from Humboldt and Esmeralda.

Of the several thousand ledges, located within five or six

miles of Austin, it would be too much to expect that all would pay for working, but if one in a hundred pays, Reese River must shortly become the most important silver-producing country the world has ever known. Working tests have been made of rock from over a hundred ledges, and the yields have certainly exceeded what could have reasonably been expected. Our mill men lack the experience of properly treating the ores, and the mills are not supplied with the requisite machinery for saving the silver, yet with these drawbacks, scarcely an instance has occurred in which the yield was less than a hundred dollars a ton, and the average yield will probably exceed two hundred. This is much

greater, as I am assured by those who know, than the average yield of the Comstock mine. Our mines, it is true, are mostly small, and none of them will compare with the Comstock for size; but there is one advantage of small mines which should not be overlooked—that is, the saving the expense of timber. A ledge of one or two feet in thickness can be safely worked with very little timbering; but to work a ledge the size of the Comstock, in a country like this, where wood is not plenty, the expense of timbering would be enormous.

Having resided here for several months, and carefully examined several hundred mines in this vicinity, and having, withal, had considerable experience in quartz mining, I have no hesitation in predicting, that in one year from now the bullion shipments from Reese River will exceed the present shipments from Virginia City; and I shall be much disappointed if Austin is not, in less than three years, the second city on the Pacific slope. T. H. R.

**THE UNION Gold Mining Company of Klamath Co.,** have recently got their mill into very successful operation. They are running eight stamps with steam power and crushing about 12 tons per day. Their average "clean up" is about \$300 per day, or \$25 per ton—a very good business.

We have received several very rich specimens of ore from the "Illinois" and "Golden Age" mines, Reese River. The Illinois has a shaft thirty feet deep, with a vein five feet wide. The Golden Age has a shaft down 35 feet with a three foot vein, well developed, and regularly increasing with the depth. These companies have determined to prosecute the work of development during the winter months. Both have quite an amount of good ore already out, and each bid fair to soon take a high rank among the rich mines of Reese River. The idea that once obtained credit that the Reese River veins were too small to work, or were not to be depended upon in depth, is now pretty well exploded.

Among the recent scientific agricultural suggestions is one for improving chalky soils by using sulphate of iron as a manure. It is stated that just as a preparation of iron is prescribed to the human subject when the blood is poor, so poor and barren soils may be greatly improved by sulphate of iron.



[From our Travelling Correspondent.]  
CAMPO SECO.

Mr. Editor:—When I started upon my present route of inspection, commencing from the Keystone claim in Copperopolis, up the Salt Spring Valley north to Campo Seco. I thought I could accomplish the whole in three days, and include the result in one letter. I find myself mistaken in both calculations. The mines in this section are so numerous, and far apart, that for the present, I must omit those in the valley and confine myself to those around Campo Seco. By this arrangement I shall save time, and avoid confusion.

It will be unnecessary to say much about the town, as people generally, I presume, are familiar with it. Before the "copper age," Campo Seco, like many other small towns in the interior, which flourished under the "golden age," was falling rapidly into insignificance. During the three years elapsing since I was here, I observe several striking and gratifying improvements. The town looks cosy, and well-to-do; the people are orderly and of a most respectable class. The two hotels, the Hooker and Phoenix, are well kept and comfortable; while the stores, and the appearance of things in general, indicate a new spirit, and that Campo Seco under King Copper, is destined to become quite a place.

And well it may—for the mines so far as developed, are of first-class character. At San Francisco you have no idea of the advanced condition they are in, both as regards the development of the lodes under ground, and the excellence of the works above ground. Their position, however, being over four miles apart, east and west of the town, requires a few preliminary remarks, to make it comprehensible to people at a distance.

Since I reported upon the Gopher District, I have given the country in all directions a more close and thorough examination, and I find each of the three systems already described, contain at least four distinct and separate veins. This fact, though it may sound strange to many, is nevertheless very obvious in the Copperopolis Valley, at the Collyer and Plymouth Rock claims; it is equally so at the Massachusetts Hill, three miles west, and I am satisfied it is the same at Gopher. I had adopted this opinion before I reached Campo Seco; and, here I find the three systems, in character, position, and distance apart, exhibiting themselves precisely the same as they did 20 miles south. If geology in certain respects, "is never at fault," there is no other way than this, of explaining the difficulty and contradiction at once apparent to the investigating mind, if an opinion is to be formed of the probability of general success by the location of each shaft. Many intelligent gentlemen, to whom this contradiction has long been apparent, as it was to myself from the commencement, now admit my theory has the strongest claims to consideration, inasmuch as it ultimately ensures success to all the prospecting going on, which otherwise would be a matter of very doubtful propriety.

I think as far as Campo Seco is concerned, the linear course of each system may be thus safely located. The Copperopolis lodes, strikes the Comeh claim in the valley, go to the Forty nine and Liberty claims, and thence to the John Bull district on the Mokelumne river east of north three miles above the town; the Massachusetts Hill lodes, west of north, one mile and a half below the town—while the Gopher lodes range somewhere about Poverty Bar, and Lancha Plana to Lone City, where I am satisfied they can be struck in the neighborhood of the cemetery. The advantages of this theory, in three respects, are immense; it certainly proves these copper deposits to be one of the greatest wonders in world; it suggests more safe and paying investment for the redundant capital of the State, than all the far off Reese Rivers and Devil's Gates put together: and, if systematically observed, will save the companies, different lodes north and south of Copperopolis, an untold amount of money, labor and time. It is an old axiom, that whenever science gives certainty to labor, it is in that proportion valuable and authoritative. If I am correct in my theory, than the labor going on around Campo Seco, involving thousands of dollars, must be successful; if not, the greater portion of it is a foolish, desperate speculation, conceived in temerity, pursued in temerity, which will bankrupt eventually two-thirds of those interested. I take it for granted, all who understand mining will admit at once, that to comprehend distinctly the system you seek to develop, its locality and linear course, is an immense advantage; because, that knowledge discloses the two

great secrets of successful mining—viz, where to commence, and what to do. Such I hold is the advantage this theory confers; and applying it to the Campo Seco mines, it points only to two undeveloped claims, which in the end will prove failures.

After this explanation, it will no longer seem strange to our readers not thoroughly posted in the mysteries of mining, how a variety of claims, running in parallel lines, four or five miles apart, can all be successful, or expect to be so in the end. I shall now introduce you to the Campo Seco mines, no less important or numerous than those already described. It will be most convenient to commence with those lying west one mile and a half below the town. First, on the banks of the Mokelumne river is the

#### COPPER HILL.

This mine, at present, is one of the two most important in the neighborhood. It is incorporated, containing 3,200 feet, divided into 3,200 shares. The main shaft is 280 feet deep with four shafts. A large quantity of valuable ore has been shipped from this mine, though the yield is not so great just now, simply because the black ore is changing into the yellow sulphurets. In fact I got a piece of rock off the bottom, which it was impossible to tell from the Massachusetts, on which system I locate the se mines. If this lead opens here, as it has at Copperopolis, of which I have no doubt, high as Copper Hill stands, in will more than double its value. All the work at this mine are excellent. A large water-power wheel forty feet in diameter is being put up, which will be a great improvement. Fifteen hands are employed day and night. No stock in the market. A short distance south on the same lead comes the

#### CAMPO SECO.

This mine is the compeer of Copper Hill. It contains 2,600 feet, divided into 200 shares. The main shaft is 100 feet deep, six feet in the clear, exceedingly well put together, from which a drift runs east 70 feet. Out of this I took the beautiful specimen of blue ore I send for your cabinet; the other, (black) perhaps richer, comes from the bottom of the shaft, where like the Copper Hill, the vein I think, is giving way to the main lode of yellow sulphurets. This mine has also yielded a very large quantity of these rich colored ores, and will continue to yield them in large quantities for years to come. The drift is a splendid piece of work, and does the Superintendent much credit. The mine is worked by water-power, the wheel being 40 feet in diameter. All the upper works are very complete and efficient. The sorting-shed is sixty by thirty feet, from which a track 410 feet long runs to the shaft. The only thing wanting is a pump, and that they are preparing to put down. It is much needed below. A number of hands are also employed here night and day. The Campo Seco stock ranks high, and deservedly so, for it fully merits its reputation. It will take another year, however, to develop its real value. Next in succession, but on another vein comes the

#### LONE STAR.

This claim contains 1,500 feet, divided into 1,500 shares, being incorporated. The main shaft is 95 feet, but, at present, the lead though very large, is equally corrupt, bearing antimony, iron, and arseniates, as well as copper. Still the indications are flattering. The prevailing error of sinking the shaft too far west has been committed here, and, they have consequently to run a long drift through very hard rock to cut the vein, and then the old tale, a new shaft, will be needed. Nevertheless, the mine ultimately must be valuable. On the Lone Star, as throughout all this section, the croppings are splendid. On the other side of a small creek, and directly opposite, is the

#### LANCHA PLANA.

This claim is incorporated, and contains 3,200 feet, divided into 3,200 shrs. Main shaft 164 feet, from which runs a short drift to the west. The Lancha Plana enjoys a very high local reputation. I could not go to the bottom of the shaft, as the men were timbering, so I did not see the vein, which I understand is very fine and large. I regret this as I was anxious to see what resemblance it bore in formation and character to the Massachusetts. The Lancha Plana has yielded large quantities of first class ore. At present the Company are preparing to put up an engine of twenty-horse power, which when completed is expected to develop great things a few minutes walk south from the Lancha Plana brought me to the

#### HIGBEE.

This claim has 2,400 feet, divided into 2,400 shares.

Main shaft 65 deep. The Higbee is not on the same lead as the Lancha Plana and Lone Star, but that of the Campo Seco and Copper Hill. Work is suspended here for a time, to erect machinery for hoisting, and as the shaft was full of water, I could not, of course go down. Undeveloped, however, as the mine is, the stock has a local value quite respectable. I understand the lead opens very handsomely strong sulphurets following the tale down all the way. Next the Higbee on the same vein is the

#### HAWES & CO.

This claim contains 1,200 feet, divided into six shares. Main shaft 85 feet. Like the Higbee, this vein opens very handsomely, carrying all the elements and indications of large strong lode. All it needs is depth. Work going steadily. Last on this side of the town, that I could hear of, meriting notice is the

#### OMAHA.

This claim contains 1,400 feet, divided into 1,400 shares. Main shaft 75 feet. Work is suspended here, for the present, to prepare machinery for hoisting. When resumed, the company intend running a drift to the west. The ledge is very strongly developed and very promising.

I must now return to the town, and proceed somewhat miles in an opposite direction to John Bull district. The mines in this section are unquestionably on the "Union lead," and with one exception, are all exceedingly promising. The country is hilly, barren, torn up, rough, bearing a strong mineral aspect. The lodes here on the surface are well developed. I shall commence at the river. Immediately on the banks is the

#### NORTH STAR.

This claim contains 1,400 feet, divided into seven shares. Main shaft sixty feet, somewhat small, but very well timbered. The vein shows itself beautifully. I think the copper will be struck first in this mine, owing to its favorable location. Next in rotation, is the original claim of the district the

#### EUREKA.

It contains 2,000 feet, divided into ten shares—incorporated. Main shaft, 140 feet. At the bottom, the vein rapidly concentrating, with a very handsome hanging wall. The work in this shaft is well done, and neat throughout. The accommodations are good. There are about forty tons of No. 2 ore on hand, which will be largely increased before Spring. The Eureka is a fine institution and well conducted. Next comes the

#### BAY STATE.

This claim contains 3,200 feet, divided into 3,200 shares. Main shaft 84 feet, with the vein opening on the bottom. Like the Eureka, the work here reflects credit on the Superintendent, only the ladder is too long in the steps for a man with short legs. According to appearances at present twenty or thirty feet more, ought to strike good ore. The rock is very pure all the way down. Accommodations good. Since writing the above, magnificent ore has been struck in this claim.

#### BUNKER HILL.

In my opinion, this shaft is altogether wrong in its location and shows few or no indications of a vein. The drift at bottom running east is still worse. They should prospect the opposite hill to the west. Behind this claim a short distance east, comes the

#### WINFIELD SCOTT.

This claim contains 6,400 feet, divided into thirty shares. Main shaft is down thirty feet, just commenced a splendid opening, and a strongly developed lead.

#### SEBASTOPOL.

It contains 4,000 feet, divided into twenty shares. Main shaft thirty feet, a counterpart of the Winfield Scott, with equally favorable prospects of success.

#### SPRING RANCH.

It contains 6,200 feet, divided into thirty-one shares. Main shaft fifty feet, carrying from the start a well defined ledge. It has now a splendid hanging wall, and may certainly be considered an established fact. Some 300 feet from this claim lies the

#### MORNING STAR.

It contains 6,000 feet, divided into thirty shares. Just commenced under equally favorable auspices. Last in this section comes the

#### MOUNT VERNON.

It contains 3,000 feet, divided into 3,000 shares. Main shaft fifty-three feet, in which they have struck a small vein.



of good ore. Work being suspended for a time. I did not go below.

Such are the claims around Campo Saco. I am very favorably impressed with their character. Taken generally they are more advanced, and look better than in any other section have hitherto been. When the sixteen mines get into full operation, what a change they will produce. I have been very cordially received here by all classes. To Mr. Brown of Copper Hill, Mr. Spencer of the Campo Saco, Mr. Baldwin of the Eureka, Mr. Sparkes of the Bay State, Mr. Higbee, Mr. Lawes, and Mr. Coleman, I beg to acknowledge my obligations personally. They have too liberally patronized the Press. Most ardently do I wish them long lives to enjoy the fruits of the success before them. L. H.

**G. E. MOORE,**  
Assayer and Analytical Chemist,  
No. 612 Sacramento Street,  
HAVING ESTABLISHED A CHEMICAL LABORATORY,  
furnished with every requisite for delicate analytical work, is prepared to execute the Assay and Analysis of Ores, Mineral Waters, Guanos, etc., with accuracy and dispatch.

REFERENCES:  
Prof. J. D. Whitney, State Geologist, San Francisco.  
Alsop & Co., San Francisco.  
Sather & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento. sep14

**ASSAYS!**  
Promptness and Accuracy Secured  
BY THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!  
Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**H. CHURCHILL, M. A.,** (FROM EUROPE.)  
24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. jly6  
"HINTS FOR PROSPECTORS" Free by Post.

**RIEHN, HEMME & CO.,**  
**ASSAYERS.**  
Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.  
Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO  
Messrs. F. PARROT & CO., Messrs. ALSOP & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.  
HAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
Assaying, also in Mineralogy and Chemistry as far as re-  
quired to become a practical Assayer.

**AGENTS WANTED.**  
We want a good Agent in every city, town and settle-  
ment, on this Coast. Applicants will send their names  
with reference, when specimen numbers of the **Min-  
ing & Scientific Press** will be forwarded to them,  
and their names added to our published List of Agents.  
EWER & SMITH.

WM. H. MEAD, THEODORE VAN TASSEL.  
**MEAD & VAN TASSEL,**  
**HATTERS,**  
Montgomery st., cor. of Commercial,  
SAN FRANCISCO.

TO OUR FRIENDS AND THE PUBLIC GENERALLY.  
Having Purchased the entire interest of Messrs.  
Sather & Co. in this city, we shall, on the 1st day of  
July assume the management of the  
**HAT EMPORIUM,**  
long conducted by that firm.

Mr. WILLIAM H. MEAD, for the last seven years Sales-  
man with Messrs. Fisher & Co., respectfully solicits a con-  
tinuance of the patronage so long and liberally bestowed  
on the old House, feeling entire confidence in our ability  
to suit in every particular.  
Mr. THEODORE VAN TASSELL, for eight years with  
Messrs. Le Gay & Co., would be pleased to see his friends  
at his new place of business.  
The long practical experience of Messrs. Mead & Van  
Tassel in the Trade justifies them in saying that their  
work cannot be excelled either in finish or durability.  
Having perfected arrangements, we shall be in constant  
receipt, by every steamer of soft goods of the very finest  
French and American Manufacture.  
Our Stock now on hand is superb.  
Call and examine, and judge of the merits of our claim  
to the title of "LEADERS OF FASHION."  
Respectfully,  
**MEAD & VAN TASSELL.**  
Montgomery street, cor. Commercial.

## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of the  
most Effective, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
class of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

### METHOD OF CRUSHING ORE.

The BRYAN BATTERY, as now constructed, is believed  
to combine all the Improvements which the experience  
of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent, more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1850, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing complete about 6,000 pounds,  
and the Five Stamp about 7,000. The Mortar Bed being  
cast in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

MANUFACTURED ONLY BY  
**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

nos 125 to 136 First street, and 126 to 144

Fremont street.

## MINING & SCIENTIFIC PRESS. THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper  
commenced Sept. 11, 1862. It is intended that every  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits,  
together with several original engravings of new inven-  
tions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietor to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published.

### The Inventor!

Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having had  
great experience as Patent Agents, together with facili-  
ties at Washington that enable them to obtain Patents  
with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its col-  
umns will from time to time contain original engrav-  
ings of new machines and inventions, together with a  
large amount of reading matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.

### The Mining Interest!

Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of Min-  
ing Stocks, new inventions of Machinery adapted to that  
purpose, and of everything generally that may be of ser-  
vice to the Miner.

### To Chemists, Architects and Millwrights.

This journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of infor-  
mation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plan-  
ters will not be neglected, engravings will be given of  
agricultural implements, and the farming interest gen-  
erally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum]  
**Club Rates.**  
Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Names can be sent in at different times and from  
different Post-offices. Specimen copies will be sent  
gratis to any part of the country.

**EWER & SMITH, Publishers,**  
Room 67, Government House, Corner of Washington  
and Sansome streets, San Francisco.

**I. C. E. KLEPZIG & CO.,**  
**GUN MAKERS,**  
...AND...  
**DEALERS IN GUN MATERIALS,**  
733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.  
Gilding, and also Silver Plating, by E. Ekland. je21

**LEANDER RANSOM,**  
**Civil Engineer**  
AND  
**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

### ALSO

**STATE LOCATING AGENT.**  
And as such having the sale of  
**600,000 ACRES OF STATE SCHOOL  
LANDS,**

At the low price of \$1.25 per Acre.  
Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE, 328 Montgomery streets. oc7-3

**D. NORCROSS,**  
Masonic Temple, No. 6, Post Street.  
Military Goods of all Descriptions.  
Navy Trimmings and Embroideries.  
REGALIA FOR ALL ORDERS.  
aug 17

PEOPLE'S  
**OPPOSITION**  
**Steamship Line!**  
Special Notice.—The Panama  
Line have been withdrawn from the Ni-  
caragua Route until further notice.  
**GREAT REDUCTION IN RATES!!!**

The Fast and Favorite Double Engine Steam-ship,  
**MOSES TAYLOR,**  
J. H. BLETHEN.....COMMANDER  
Will be dispatched for PANAMA  
From Mission street Wharf.  
**FRIDAY, - - - - - NOVEMBER 13, 1862**  
Punctually at 9 o'clock, A. M., on  
Connecting at Ashwall, by the Panama Railroad, with  
the Splendid Steamship  
**ILLINOIS - - - - - 2500 Tons.**

The Moses Taylor, since her 1st trip has undergone the  
most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins enlarged, refitted and  
repainted throughout—making her accommodations equal  
to any Steamer on the ocean.  
For further information or Passage, apply to  
J. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

**BOOK KEEPING,**  
**Penmanship**  
AND  
**COMMERCIAL CALCULATIONS,**  
Taught by J. S. LUTY  
**PRACTICAL ACCOUNTANT,**  
305 Montgomery Street, Corner of Pine.  
**TO QUARTZ MINERS.**

All persons interested in Mining Ma-  
chinery are invited to call at Donahue's Foundry and  
examine my improved Amalgamator. It is unquestion-  
ably superior to anything now known for amalgamating  
Silver and Gold. It works 1000 pounds at a time, and  
will amalgamate over three tons a day. By the motion  
of the revolving muller, the pulp is drawn through its  
centro and passes under it, between the grinding sur-  
faces, to the circumference: from whence it passes again  
over the muller to the centre, through the holes and be-  
tween the grinding surface to the circumference as be-  
fore. Thus a constant circulation of the pulp is kept up,  
bringing the particles of ore again and again under the  
muller, and reducing the whole mass to an impalpable  
powder.

No quicksilver lies between the surfaces to be ground,  
but at the circumference and centre of the pan where the  
metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in De-  
cember last, and all persons are again warned against  
purchasing machines made at the Miners' Foundry called  
"Whoeley's Amalgamator," as they are an infringement  
on my patent, and a suit is now pending in the U. S. Cir-  
cuit Court against the parties infringing. My Amalga-  
mators can be seen running at Donahue's Foundry, where  
all can judge of their operation and the very superior  
style in which they are being manufactured.  
sep21 THOMAS VARNEY.

**PATRONIZE**  
**HOME MANUFACTURES!!!**

**James Longshore,**  
**Trunk and Valise Manufacturer,**  
307 Sansome Street, under Tehama House. Trunks and  
Valises, Wholesale and Retail, Fine Sole Leather Trunks,  
Valises, and a fine assortment of ADAMS' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
aug x

**APARTMENTS.**  
FURNISHED APARTMENTS, WITH, OR WITHOUT  
Board, at 1018 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
home will do well to apply. jy6

**FOR SALE.**  
**PATENT PRESSED RUSSIA IRON MINING PANS.**  
Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipe  
Cooking Stoves and Heating Stoves  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the  
**UNEQUALLED**  
**MONITOR COOKING STOVE**  
**OR RANGE,**  
FOR HOTELS.  
To which we call particular attention,  
jo-29 TAY, BROOKS & BACKUS.



## Mining Notabilia—Extracts from Correspondence, etc.

## THE COMSTOCK LEAD.

From Virginia City and vicinity, we continue to hear most favorable accounts. The Ophir is still taking very rich ore from the spur or lead developed by the recent "cave."

The Central, No. 1, are down 400 feet, perpendicular, where they have a fine lead developed. The California, next adjoining on the south, are down about 300 feet, where they have a fine vein of ore. The Company have recently put up a very fine house upon their mine, with all necessary conveniences for actual operations.

The Central No. 2, are still driving ahead their branch from the main Latrobe Tunnel, which is to strike and develop their ground to the depth of nearly 500 feet. They have now a little over 100 feet to run, through very favorable ground. Much anxiety is felt by all Comstock owners, in this vicinity to see this important tunnel reach the Comstock Lead, which it will fit do on the Central No. 2 ground, and within sixty or ninety days.

The owners of the Kenney ground (70 feet) are doing nothing, but waiting for developments by their neighbors. The White and Murphy company, who own 210 feet are actively engaged in clearing off their ground preparatory for the erection of house, machinery, etc. During the present season they will put up their house, and a "whim," and commence a shaft, which will be four by twelve feet. In the Spring they will put up heavy machinery, and push on as speedily as possible to a full development of their mine.

The Dick Sides, next adjoining, Company are now down 200 feet with their main shaft, which is covered with a substantial house. They have their machinery on the ground, which will soon be up and running.

The Best & Belcher are keeping space with their next neighbor, just noticed; both are going to work on the right basis, for properly opening their mines.

Next in order of succession comes the Gould & Curry. This mine is too well known to need any particular notice in such a sketch as this. The deeper they go in this mine, the richer the ore appears to be. In their lower gallery, the ore surpasses anything yet found in that famous claim, both in quality and quantity.

The Savage, next adjoining, are still taking out very rich ore, and plenty of it. This is one of the first class mines.

Our correspondent confesses to not being particularly posted as to the Hale & Norcross, but believes it to be a good mine.

The Chollar has the best works on the Comstock, and our correspondent thinks that it will soon be second to none in the Territory. The Company is now taking out considerable ore which is paying well—about \$50 to the ton. They are now supplying four mills, and will soon be in condition to keep a dozen at work. Our correspondent saw a few days since at an assay office, "bricks" to the amount of 200 lbs of bullion, worth \$5,500, the result of 100 tons of ore which had just been put through the mills.

The Potosi Company are taking out some very good ore from the north end of their claim, but at the south extremity, where they recently erected a small engine, they have shut down, evidently pretty well satisfied that there is nothing south of the Chollar line, at that point. This Company are now opening their third gallery at the depth of 310 feet. The ore which they are at present taking out, comes from the first gallery at a depth of 180 feet. Very superior ore was struck on the 14th. inst., near their engine shaft in the second gallery. This mine is under the management of Mr. De Land, and the manner in which work is now being prosecuted, and the substantial character of its machinery, reflects the highest credit on his energy and skill as a Mining Superintendent.

"420," a name by which the next adjoining ground is known, have let a contract to sink a shaft 150 feet—4 by 12—for \$22 per foot, the contractors furnishing everything. The claims situated south of this point, are embraced within the Gold Hill district, of which we shall defer mention until another time.

AUSTIN, NOV. 14TH., 1863.

MR. EDITOR:—The Miners of this district, subject to a call made through our local paper, met on the 11th. inst., and decided that the mines should not be laid over, by a unanimous vote. After which a resolution was passed requesting that this decision should be communicated to the most important papers in this Territory and the State of

California; among which I find the name of your valuable paper, and I may as well say here, your enterprising journal, by its steady, and devoted efforts in behalf of the mining interests in general has given it no small significance among the miners of this district.

What would have been the position of our mines, had this movement on the part of some few drones who would like to spend the winter in more congenial quarters, and hold on more feet than they could work, is too suggestive to be misunderstood. The fate of Humboldt with all its native wealth, stands spectre-like before our vision, and warns us of our danger. We will improve by it.

In regard to this place, such has been the rush of enterprising tradesmen with a large stock of goods of every kind, that they now stand at their doors, if they are so fortunate as to have any, like a skipper on the quarter-deck, whistling for a breeze. [Customer?]

Mechanics as a general thing, have had the best time of it. They have had lucrative and constant employment. Medical men have poured in by scores, proffering their services, offering balm and consolation to the sick and dying—for a consideration. If the spark of human kindness predominates; it proves a dangerous experiment, for ten chances to one, his labor goes unrewarded and he must besides purchase his own medicines or see his patients fade like the leaves in Autumn. By a combination of the druggists, the price of drugs is the greatest burden we have to complain of.

No one living away can possibly know the amount of sickness in our midst. The cold weather is now upon us, and hundreds are unprepared to meet the storms and must be exposed, endangering their health and multiplying the objects of charity, already alarming.

If this is plain talk, it is the truth, nevertheless, and as a correspondent of your candid journal, I am, I trust, but carrying out your injunctions when you enjoined upon me to write nothing but the truth and the whole truth. Such has been the demand on public charity, that our county commissioners have resolved on opening a hospital at the earliest date, and when it portals are opened, the rush will be beyond its capacity. Many do not like this liberality on the part of our commissioners. It will multiply their taxes, forsooth! I will ask, what shall we do? Shall we hoard up our treasures, gather in our harvest, and say we have no interest in our fellowmen? God forbid! We have men of hearts, as well as nerve, and we will help the afflicted, and look to an approving conscience for the reward. To such men as Judge

—, a gentleman well known in California, are we indebted for this act of public benevolence. May Heaven ever smile with approbation on his big heart, is the prayer of many noble souls, now restored to health, who are too full of gratitude to express their thanks for his untiring, indomitable efforts in their behalf. Did I not know of his many acts of kindness I might say less. Should this communication ever meet his eye and afford him pleasure, let him understand, I am not done with him yet, and the whole people will cry Amen.

In my next I will treat of the mines in this neighborhood, and the extent of their development. Some valuable discoveries have been made quite recently. One called Amador, in the Yankee Blade District, has created a great excitement. I have seen some of the rock and it certainly looks like the best in this district. I shall make it a visit, and will give you the result.

"V.D.L."

## THE NEWTON COPPER MINE.

The Newton is ranked as one of the leading copper mines in the State, perhaps second only to the Union. The Proprietors were offered \$250,000 for the mine some six months since, with a condition; \$250,000, without conditions would have taken the mine at that time. A much larger amount of coin at the present time, however would fail to take it. This mine was first opened about one year since. The first shipment of ore was made in January last. Since that time 1000 tons of ore have been shipped; having been disposed of at highly remunerative prices; \$23,000 was received from one party in this city. Until recently all the ore raised from the mine has been sold without sorting. The better plan of assorting the ore has now been adopted, and it is now divided into Nos. 1 and 2.

The mine has been opened by two shafts, one of which, is 130 feet deep, and another 250 feet distant, is 70 feet deep.

From the first shaft a drift has been run 200 feet north and 60 south. The second shaft is still going down. The shafts are all on the lead. Some idea may be obtained of the strength of the same from the fact that all the ore yet raised about 1,200 tons, has been taken from these shafts and drifts; stooping has not yet commenced. The mine has paid expenses from the beginning. No assessment have ever been levied upon it, and probably none ever will be. It is the intention of the proprietors to thoroughly open the mine in such a manner, that whenever the proper facilities for transportation are presented they can put a large force at work, and raise several hundred tons of ore per month. A present these facilities of transportation are confined to return teams, all of which are loaded as fast as they present themselves at the mine. A railroad has already been projected from Stockton to strike the Pacific or Folsom road some point above Sacramento. This road will pass within about 12 miles of the Newton mine, and it is expected that by another year the mines of that region will develop sufficient business to warrant the construction of a branch to Ion City. The mines of that region will not be thoroughly developed until railroad facilities are opened up for taking the ore to market.

There are no croppings on either the first north or south extension of the Newton mine. Croppings which present themselves are on the second extension only—our note are at fault whether north or south. We are indebted for the above particulars to Mr. J. Newton, one of the proprietors and brother of the Doctor, with whose name the mine has been more particularly associated. The mine contains 1,800 feet, divided into nine shares of 200 feet each.

## MORE UPON CADMIUM FLUXES.

A publication of the hour revives the idea that a valuable discovery has really been made in Contra Costa County, Sacramento Street was once made to divide the honor, but this claim is pronounced "wild cat." There never was any cadmium. There is nothing but a natural combination. The proprietors of the land must get all the ore is worth as a flux or whatnot. No one may share with them—no one else may get anything for discovering (pshaw!) that a natural combination has a greater value than a simple mixture. Its application is not patentable. (?) Is not this the argument of the monopolists? We think we do not mistake it. Thanks to the present discussion, we learn that the Contra Costa material occurs "under the many forms—of an earth enclosing crystals of macle—of a lamellar mass breaking into leaves like slaty lastly of a hard dark green rock." Among its many forms five different men have, at least, found one which contains cadmium. This is of no other value, perhaps, than shown that at present the subject is not exhausted. We are to, by every learned compiler that it may be compared with the argillaceous schist of the Lower Hartz, but that the multiplicity of its bases, renders this silicate as superior to the schist, Newcastle to Mont Diablo. The multiplicity of bases foribly reminds us of the six days fight which resulted in change of base. Is it at last come to this that the value of this cadmium flux is only to add fusibility? We do not deny that this is of value—but so is a nickel cent if not in California—it has not the true ring, we do not see the color. More than increased fusibility and much more is required to constitute "a very effective flux by the aid of which the different combinations of copper and other metals can be reduced. It is "a silicate with many bases" but slags formed with it (?) have been seen by us which indicate that it has a sufficient excess of silica to absorb much iron. Is it then acid or basic, must we mix it with sand or iron? Some of the same slags appear to contain a proportion of copper so large that their peculiar "fusibility" does not seem of much advantage—this may have been only due to defective manipulation—is this a correct assumption? These several points are still undecided. The proprietors of the land, if they are to be the only parties to have an interest in this claim, may well be at the expense of definite examination.

EELS IN CANALS.—The well-known French author, Edmund About, has proposed that the French Government shall stock all the canals in France with eels, both as a source of revenue to be raised on grants of the right to fish, and of a cheap and wholesome food for the poorer classes of the people.







**FINE SPECIMEN OF SILVER ORE.**—A fine specimen Mexican silver ore, may be seen at the door of Faulkner & Son, 411 Clay street, weighing about 400 pounds and assaying \$300 to the ton. The specimen is from a large mass, thrown off from the vein at a single blast. The Company has about 100 tons of similar ore at the mouth of their mine, ready for shipment, with plenty more of the same sort to raise. Three distinct veins pass through the Company's ground, which will average about six and one-half feet thick, separated by about 50 feet of unproductive rock, resembling iron ore. The San Antonio District is one of the most promising in Mexico, and is fast filling up with American adventurers.

**TABOR & HILL, Real Estate Agents and Stock Brokers,** place their card in our columns to-day. Messrs T. & H. are members of the S. F. Stock & Exchange Board and San Francisco Board of Brokers. Any business entrusted to their hands will be promptly and faithfully attended to. They may be found at 402 Montgomery street.

**MINING AGENCY.**—By reference to our advertising columns it will be seen, that we have made arrangements to obtain special information, through a resident correspondent, with regard to any particular mine at Reese River. Parties in the city about to invest in "feet" in that neighborhood, and not having time or caring to incur the expense of visiting the locality, will do well to avail themselves of the opportunity hereby presented securing reliable information, previous to investment, at a moderate cost.

Persons already holding "feet" and desirous to learn through a disinterested source the actual condition of the mine in which they may be interested, will do well to embrace the opportunity here presented of securing the desired information.

We shall establish agencies similar to the above in all the principal mining districts, at an early day.

### Giffards Injectors,

FOR SUPPLYING OILERS WITH FEED WATER without Pumps. No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODDART, Agent,  
je22 Cor. Pine and Front Sts., San Francisco.

### Owens River Canal Company.

#### FOR SALE,

FOR ACCOUNT OF THE COMPANY, 7,000 SHARES OF the above stock, at \$1 per share. It is confidently presented to the public as the best investment, for the price, now offered in this market.

Office of the Company No. 328 Montgomery street.

### New Patent Agency.

**WE HAVE CONNECTED WITH THE** Publication of the "Mining and Scientific Press"

**The Patent Agency Business,** And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency** The most desirable place to make application for Letters Patent on the Pacific coast. Apply at Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. **EWER & SMITH.**

**FOREIGN PATENTS OBTAINED** By application at this Office, Room 57 Government House. **EWER & SMITH, Solicitors.**

### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. **EWER & SMITH.**

### PATENT RIGHTS.

**Patent Rights Bought and Sold,** At the office of the "Mining and Scientific Press" Agency **EWER & SMITH.**

### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventor. **EWER & SMITH.**

### GENERAL NOTICES.



**DR. H. AUSTIN,**  
DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheap and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. **je-29**

### DESKS

AND

Office Furniture,  
OF ALL KINDS..... FOR SALE BY

**JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all Kinds, attended to.

### SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1882.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1882

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

**FREDERICK MANSELL,**

**MECHANICAL & ARCHITECTURAL**

**DRAUGHTSMAN,**

No. 423 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. **mar23 2m**

El Paso District, Los Angeles County,

### MINING AGENCY

C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

LETTERS OF EXQUIRY, containing Revenue or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to. The subscriber has a carefully prepared map, (and specimens,) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to **J. Burnett, Esq., 435 Davis St., San Francisco Cal.**  
El Paso, June 21, 1883. **C. W. TAPPAN.**  
**au31**

### R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,

**JOB TURNING & SCROLL SAWING.**

**BRACKETS,**

**RED WOOD BALUSTERS,**

**NEWEL AND CEDAR BALUSTERS**

for Stairs.

Manufacturers of every description of Oval,

Circular and Square

**PICTURE & LOOKING GLASS FRAMES**

For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS.

H. C. SOMES

### MINING LAWS AND FORMS

**JUST PUBLISHED BY H. H. BANCROFT** & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assesments, etc., with a digest of decisions of the Supreme Court and Terms for the Incorporation of Companies. Compiled by H. H. Bancroft. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. **sep14**

### H. C. KIBBE,

**MINING SECRETARY,**

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

### GENERAL NOTICES.

### HAYNES & LAWTON,

IMPORTERS AND DEALERS IN

**CROCKERY,**

**GLASS WARE,**

**FRENCH CHINA,**

Coal Oil Lamps, Table Cutlery

**CLOCKS,**

Silver Plated and Britannia Ware,

ETC., ETC., ETC.

No. 516 SANSOME STREET

[CORNER OF MERCHANT.]

SAN FRANCISCO.

### WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* These Pans can be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. **no16-tf** **ZENAS WHEELER.**

### Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,**

**CARPETS, DUCK, ETC.,**

Cor. Front and Sacramento streets,

SAN FRANCISCO.

### REMOVAL.

**OFFICE OF THE PACIFIC METAL** Surgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased. **COPPER ORES.**—Highest market rates advanced in cash, for shipments. **S. C. BRADSHAW, Agent,** 509 Sacramento street, near Sansome.

### NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Webb,

SAN FRANCISCO.

GR. A. METCALF.

D. S. HUTCHINSON.

**METAL F & HUTCHINSON'S**

**PHOTOGRAPHIC GALLERY,**

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

**\$3 Per Dozen!**

Large sized Photographs \$3—Extra copies \$1 each. **AMBROTYPES** in all Styles and prices.

**OLD PICTURES** copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. **aug.**

### HOTELS.

### International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

**FIRE-PROOF BRICK BUILDING.**

Most convenient to the Steamer's Landing, Business etc. & Places of Amusement **OPEN ALL NIGHT.**

City Railroad Cars Pass the Door. **REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY FURNISHED** this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair Mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;** and SETS AS GOOD A TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

**F. E. WEYGANT, PROPRIETOR.**

### Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY** advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles, **WHICH SECURES TO OUR GUESTS QUIET.**

The prices for board and Rooms are very moderate—by the day, meal or week. We solicit a call from ALL. **F. E. WEYGANT, Proprietor.**

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

**F. E. WEYGANT.**

### THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,

SAN FRANCISCO.

**STEPHEN SMITH.....PROPRIETOR.**

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

**The Rooms are handsomely furnished,** supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House **Free of Charge.**

The House is open all night.

### P. M. S. CO.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connects via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

### FOR PANAMA.

The following Steamships will be dispatched in the month of November, 1883.

**Nov. 3d, - - - Steamer Golden Age.**

**Nov. 13th - - - Steamer St. Louis.**

**Nov. 23d - - - Steamer Orizaba.**

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.

And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

**A. B. FORBES, Agent.**

Je4 Corner of Sacramento and Leidsdorff sts.



FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

# REYNOLDS' Patent Cut-Off and Governor, FOR STEAM ENGINES.

127 of these Invaluable Machines, ARE NOW IN USE In California and Nevada Territory, giving a perfectly regular motion and Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor** Is the CHEAPEST, SIMPLEST and QUICKEST to act and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

**Clark's Steam and Fire Regulator,** For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure ten pounds on the square inch. It CANNOT get out of order and any person can put one up in an hour after the damper is put in.

**Ingersoll's Patent Drill Press,** With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

**Felt for Steam Boilers, Pipes, Etc.,** At the lowest market rates.

**Steam Engines, Boilers, Pipes,** Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

**Anti Incrustation Powder,** A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past 100 years. Refer to—Sugar Refinery, San Francisco, Cottrell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States. **E. T. STEEN AGENT.** No. 33 Fremont Street, San Francisco.

**MOYNIHAN & AITKEN,** Boiler Makers and Blacksmiths, Mission, between Beal & Fremont Sts., San Francisco.

**N. B.** All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms. Jy 29

**PUMPS!** **HARRISON'S** California Lift and Force Pump, WITHOUT VALVES OR PACKING, Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

**ALL SIZES;** Capable of throwing from ONE HUNDRED to FIVE THOUSAND Gallons per Minute—For sale by **C. H. HARRISON,** PHOENIX OIL WORKS, je-15 517 Front Street, San Francisco.

**60 lbs. MARINE and Fire-Proof Paint,** MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Bulk and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

**DIRECTIONS:** For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil. For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot. For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.** When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:** HOUSE—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead. ROOF—Five parts of Mineral Paint, one part white Lead, mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years. **S. C. BRADSHAW, Agt.,** G. T. FOUQUE, Superintendent. **WORKS, North Beach; Office, 509 Sacramento st., San Francisco.**

**PALMER, HANSCOM & CO.,** GOLDEN STATE IRON WORKS, No. 19, First Street, San Francisco, Furnish Castings and Machinery of all kinds

ALSO: GENUINE WHITE IRON SHOES AND DIES. PALMER, HANSCOMB & CO. **To Quartz Miners.** Knox's Improved AMALGAMATING PAN, WITH PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known. By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be other wise lost. Made exclusively by PALMER, HANSCOMB & CO., GOLDEN STATE IRON WORKS, Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. **W. A. PALMER.**

**JOHN P. GALLAGHER, JOSEPH H. WEED, GALLAGHER & WEED, BRASS & BELL FOUNDRY AND LOCK FACTORY.** No. 125 First Street, opposite Minna, next door to Pacific Foundry, all kinds of Brass and Composition Castings and Finishing, done with neatness and dispatch.

**CHURCH AND STEAMBOAT BELLS, OF ALL SIZES** Made to order. Engines & Gongs made and hung in the best manner. Bank, Vault, Store and Prison Locks, also brass Padlocks and Shop Locks of various patterns, on hand and made to order. Particular attention given to casting Rudder Braces and Ship Work in general. All Jobs promptly attended to.—Prices moderate. Removed from Oregon street, between Front and Davis.

**Miners' Foundry** —AND— **MACHINE WORKS,** First St., between Howard & Folsom, SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as: Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc. Particular attention will be given to the manufacture of Machinery in sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition. Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere. **HOWLAND, ANGEL & KING** San Francisco, February 23, 1863.

**San Francisco Machine** ....AND.... **IRON WORKS!** Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON most reasonable terms. Steam Engines, High and Low Pressure; Quartz Mills, Saw mills, Mining Pumps, Hoisting machines for mining purposes, Wine Presses, Agricultural implements etc, etc, and Castings of all descriptions made to order. Steam Engines exchanged and for sale by **DEVOR, DINSMORE & CO.** REPAIRING promptly attended to. **FOR SALE.** San Francisco, July 1863. Jy 13

**VULCAN IRON WORKS COMPANY** P. Torquet, Manager, STEAM ENGINE BUILDERS and BOILER MAKERS, Iron Founders and General Engineers, No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing Machinery. Shoes and Dies of the hardest iron, Russia iron Punched Screens. Steamboat Machinery; Saw, Flour and Sugar Mills. High and Low Pressure Boilers of all Styles. JOURNAL and other Turbine Water Wheels with latest improvements.

**W. T. & J. GARRATT,** City Brass and Bell Founders Cor. First & Market sts., San Francisco.

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE** and Lift Pumps, Church and Steamboat Bells, Tavern and Hotel Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, etc.; COUPLING JOINTS of all sizes. Manufacturers of "Garratt's Patent Improved Journal Metal."

**D. MORRIS,** MACHINE SHOP, 227 Market, corner of Beale Street.

Manufacturer of **WARRANTED FIRE-PROOF SAFES** Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. Jy 13

**LEWIS COFFEY AND RISDON,** STEAM BOILER AND SHEET IRON WORKS. The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality. Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal. **LEWIS COFFEY J. N. RISDON.**

**THEODOR KALLENBERG** Maker of Models FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to. **No. 418 Market street, San Francisco.** Jy 13m

**HIRAM WRIGHT,** PICK MAKER, Has established a Manufactory for the Making of MINER'S PICKS, at NO 121 BUSH STREET, SAN FRANCISCO, [Between Sansome and Battery.]

WHERE can be had a superior Pick for Miners use. As he manufactures all his picks under his own personal supervision, he warrants them as being made of the best material and by the best workmanship. Orders attended to and filled promptly and with dispatch. aug 17

**WRIGHT'S PICKS.** JOHN WRIGHT, of Sacramento, has established himself in San Francisco, for the manufacture of every description of PICKS, of the best material, at reduced prices. Pick Eyes of the best iron furnished in any quantity, at low rates. Orders from the country promptly attended to. **N. B.**—None genuine unless stamped with my name. **JOHN WRIGHT, 511 Market street,** Opposite Battery, San Francisco.

**CALIFORNIA TOOL WORKS!** **John Weichhart,** Manufacturer of All Kinds of Edge Tools, Etc., Plane Irons Moulding Irons, Stone Cutter's Tools, etc. No. 22 Fremont street, bet Market and Mission San Francisco, July 14, 1863.

**PATENT CLAIMS.**—We will furnish, on application, the claim of any invention that has been patented within the last fourteen years. The name of the patentee—date of patent, when known, and two dollars for copying should be sent.

**MODELS.**—Inventors will please attach to all model sent to us, their names and address, in a legible, permanent form, this will avoid confusion and prevent errors.

**DRAWINGS.**—We have highly talented and efficient Draughtsmen, by whom drawings of every description are executed in the best style of art, with promptitude, and at a moderate cost.

**WANTED** By a competent person, the Secretaryship of four Mining Companies. Books to be kept at the Office of the Mining and Scientific Press, No 57 Government House acquire as above. oct 6

**SOUTH PARK** Quartz Mill and Reduction Works, GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice. **J. H. SMITH & CO.,** Office in Shiel's Block, opposite Masonic Temple je 13 **W. R. WATERS** Secretary.

**W. W. HANSCOM,** Steam and Mechanical Engineer, Designs furnished, and Drawings made for Engines, Mills, Water Wheels, Mining Machinery, etc., etc., At Golden State Iron Works, aug X First Street, San Francisco.

**Eye, Ear and Throat.** **DR. DE CASTRO,** Oculist and Aurist,

**WHO HAS PRACTISED IN NEW** York and all the principal cities of Europe with such unrivalled success, and from each place is in possession of the most eminent testimonials, may now be consulted upon diseases of these delicate organs, with a view to their permanent cure. Deafness of long standing thoroughly cured. The Doctor employs his (by the Medical Society of London approved)

**Self-adjusting Artificial Tympanum,** For the relief of deafness, attended by loss or injury of the membrana tympani, and for the cure of discharge from the ear—the invention of Dr. Castro, M. D., author of "Deafness Practically Illustrated as to its Nature and Treatment," etc.

The self-adjusting Artificial Tympanum was first introduced to the notice of the profession at the meeting of the Medical Society of London, on the 20th of November, 1863. An animated discussion ensued on the reading of the paper, and several members of the Society bore testimony to the success of the remedy and the importance of the original discovery. Mr. Baker Brown (member) bore testimony to the Self-Adjusting Artificial Tympanum, as he had observed the immense benefit a young lady friend of his had received from it. She was in fact, quite deaf, and in a most miserable state: the effect of the tympanum was instantaneous—quite like a miracle. Five more testimonials from Members of the Medical College, New York, and the principal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and Kearny streets. Entrance on Market street.

**Mr. Editor.**—Having been afflicted with deafness for the last two years, originating from a severe cold, and for the last month suffering from the most excruciating pains in my ear, I was obliged to come down to San Francisco to seek relief. After a physician's recommendation to wait on Dr. De Castro, on the corner of Kearny and Market streets, and underwent one operation and it is with the utmost pleasure I can say my hearing was suddenly and without pain entirely restored. I deem it my duty to make this known to the public, and to recommend Dr. De Castro's skill as an aurist. **JOHN REESE, Napa Valley**

**James Callaghan, witness,** San Francisco, July 30th, 1863.

[From the Daily Alta.] **San Francisco, June 30th, 1863**

**Dr. De Castro's** through your widely circulated journal, to say, that my daughter Mary Ellen, has been afflicted with deafness since she was thirteen months old, and that she has been a member of the Deaf and Dumb Institute since it was organized. On taking her to Dr. De Castro, on the corner of Kearny and Market Streets, and undergoing under his direction, two operations, she has heard sound very distinctly; and is now, I am happy to state in a fair way to get permanent relief. The result, thus far, is satisfactory; and I deem this notice due to Dr. De Castro for his skill; and would recommend all parties similarly afflicted to give him a trial. My daughter has at different times been under the care of the most skillful physicians and aurists in California, but up to the period of visiting Dr. De Castro, received no benefit. **CHAS JOHN P. WRIGHT,** 812 Green Street.



ISAAC TABOR. JOHN HILL.

**Tabor & Hill**

**Stock Brokers & Real Estate Agents,**

503 Montgomery St., cor. Sacramento,

Buy and Sell Mining Stock on Commission. Are members of the San Francisco Stock & Exchange Board, and of the, San Francisco Board of brokers. nov23

**Silver Butte Consolidated Silver Mining Company.**—Notice is hereby given that on SATURDAY, December 12th, 1863, at 10 o'clock A. M., there will be sold at public auction, at the office of the Company, so many shares in the capital stock of the Silver Butte Consolidated Mining Company standing in the names of the following persons as may be necessary to pay all assessments now due by said parties, together with all expenses of advertising and sale, unless said assessments and charges are previously paid:

Names.	No. Shares.	Am't.
Beckford, D. R.	273	50
Brauchamp, J. H.	239, 110	50
Dora, B. F.	279, 276	20
French, B. F.	78	62
Johnson, B. R.	76, 78, 79	5
	(6, 54, 56, 57, 144, 146, 148, 253, 250, 251, 192, 193, 194, 195, 196, 197, 198, 199, 200)	54
Johnson, G. H.		27 00
Keeck, H.	125	62 50
Maynard, F. T.	4	2 00
Merrim, E. D.	121, 122, 266	52
Mills, A. D.	293, 294, 295	31
Manchester, A.	105	15 50
Percival, R.	67, 92, 94, 97	6
Spalding, G. S.	316, 317, 318	8
Sproul, J. R.	211	3 150
Warfield, J. J.	317	5 250
		15 10

A portion of the above stock has been sold and not transferred. By order of the Board of Trustees.

M. G. ELMORE, Secretary.

San Francisco, November 10th, 1863 nov16

**GOLDEN AGE G. & S. MINING CO.,**

Austin, Reese River.

OFFICE, 57 Government House.

WM. POOLER, SEC'Y.

**KUSTEL & DEETKEN'S**

**METALLURGICAL WORKS,**

FOR THE REDUCTION OF

**SILVER AND GOLD ORES,**

Tailings, Sulphurets, Arseniurets, Etc., Etc.,

Capellation and Refining of Silver and Gold,

**Practical Assays for Silver and Gold,**

in Small and Large Quantities, by Smelting, Chlorination and Pan Manipulation.

WORKS—On the San Bruno Road,

OFFICE—No. 605 Montgomery st, San Francisco.

nov 7 tr.

**HEPBURN & PETERSON'S**

**AMALGAMATOR.**

The subscribers would call the attention of the Mining Public to their Reducer and Amalgamator, and also to their Separator for reducing and separating the mineral from

**GOLD AND SILVER ORES,**

manufactured and exhibited at the Valcan Iron Works, Nos 137 and 139 First Street, San Francisco.

These machines secure to the miner a more Expeditious and Perfect Reduction and Amalgamation, a less liability to accident and delay, and a greater amount of useful effect in proportion to the power employed to keep them in operation than any other machines now in use for producing similar results. This fact is attested to by their general adoption and preference at all the principal Reduction Works in Nevada Territory; among which may be mentioned the Gould & Curry Mill, the Silver State Reduction Works, Yehyir Flat Mill, Pioneer Mill, Eastern Slope Mill, Phoenix Mill, etc.

nov8 3m\*

HEPBURN & PETERSON.

**Anderson Copper Mining Company.**

Notice is hereby given that on TUESDAY, the first day of December, A. D. 1863, at two o'clock P. M., at the sales-rooms of Jerome Rice & Co. No 327 Montgomery Street, there will be sold at Public Auction, by order of the Board of Trustees of the Anderson Copper Mining Company, so many Shares of the Capital Stock of the said Company, standing on the books in the names of the persons specified below, respectively, as shall be sufficient to pay all assessments levied thereon by the Board of Trustees, which were due and unpaid on the first day of September, A. D. 1863, together with expenses thereon of advertising and sale:

No. of Shares.	Am't. due.
J. C. McClung	175
E. R. W. Bow	100
Thomas Kyle	200
E. A. Morse	100
Edward Baniou	200
Wm. McElmould	100
M. De Young	15
F. R. Mitchell	26
W. Wilnot	20
J. W. Sheppard	70
J. C. Clark	75
J. C. Ring	40

By order of Board of Trustees.

I. C. PRAY, Sec'y.

**MINING NOTICES.**

**May Flower Gold and Silver Mining Company.** At a meeting of the Board of Trustees of the above Company, held October 30th, 1863, an assessment of twenty-five cents per share was levied upon the capital stock of said Company, payable in United States gold coin to the Secretary at the office of the Company, No. 9 Express Building, Montgomery street.

S. N. BOWSER, H. Secretary.

San Francisco, October 31st, 1863.

**Pioneer Cose Gold and Silver Mining Company,** Cose District, Tulare County, Cal.—Notice is hereby given that in accordance with the laws of the State of California, and an order duly made by the Board of Trustees of the Pioneer Cose Gold and Silver Mining Company, there will be sold at public auction, at the sales-room of Jerome Rice & Co., No. 327 Montgomery street San Francisco, on WEDNESDAY, the second day of December, 1863, at 11 o'clock A. M., so many shares in the capital stock of the above named company, standing in the names of the following persons, as will be necessary to pay all assessments now due by said stock, together with all expenses of advertisement and sale, unless sooner paid:

J. W. Basford, 100 shares, \$25; T. J. Brother, 165 shares, \$41 15; Jas. Brownlee, 25 shares, \$6 25; J. N. Brown, 18 shares, \$2 50; G. H. Bodtich, 100 shares, \$25; B. M. Barker, 91 shares, \$22 75; E. W. Chase, 34 shares, \$8 50; J. Chapman, 25 shares, \$6 25; A. B. Caldwell, 290 shares, \$72 50; J. M. Douglas, 20 shares, \$5; J. H. Earle, 63 shares, \$15 75; L. G. Garney, 75 shares, assessment Nos. 1 and 2, \$56 25; J. N. Garthwait, 25 shares, \$6 50; T. V. Hamilton, 20 shares, \$5; D. F. Hughes, 75 shares, \$18 75; Geo. H. Hare, 143 shares, \$35 75; H. Kent, 16 shares, \$4; H. C. Kinyon, 25 shares, \$6 25; M. H. Lissick, 26 shares, \$6 25; M. Laird, 20 shares, \$5; L. Lyon, 20 shares, \$5; Levy, certificates Nos. 31 and 37, 10 shares, \$2 50; Levy & Bro., 10 shares, \$2 50; J. R. Lowe, 50 shares, \$12 50; W. L. Luckett, 25 shares, assessment Nos. 1 and 2, \$18 75; S. B. McKee, 10 shares, \$2 50; Loe McGowan, 20 shares, \$5; J. S. Robinson, 62 shares, \$5 50; Wm. Reiding, 50 shares, \$12 50; H. Roche, 10 shares, \$2 50; C. T. Ryland, 40 shares, \$10; F. Stock, 25 shares, \$6 25; J. C. Smith, 69 shares, \$17 25; H. C. Van Balseu, certificates No. 36, 6 shares, \$1 50; T. W. Weiskind, 24 shares, \$6; C. B. Younger, certificates Nos. 90, 24 and 226, 28 shares, \$7.

J. S. LUTY, Secretary,

305 Montgomery street, S. F.

San Francisco, October 30, 1863. nov2 1m

**Emmet Copper Mining Company.**—Notice is hereby given that on the 1st day of December, 1863, at the office of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No. 528 Montgomery street, San Francisco, October 1, 1863, an assessment of twenty cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to T. LYONS, Superintendent, Copperopolis.

By order of the Board of Trustees.

out12

M. G. ELMORE, Secretary.

**Ruth Windsor Tunnel Company,** Esmeralda district.—Notice is hereby given that an assessment of fifty cents per share was levied on the capital stock of the above company on the 21st day of September, 1863, payable immediately to the Secretary at his office in United States gold coin.

By order of the Trustees.

T. L. Bibbings, Secretary, 305 Montgomery St.

San Francisco, October 13, 1863.

**Mining Shares For Sale**

BY

**C. A. CRANE,**

Office 28 Government House.

475 Shares U. S. Mining Company, Virginia City.

910 Shares Granada Gold and Silver Mining Company Virginia Hill, Virginia City.

168 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.

20 Shares Mohave Mining Company, La Paz District, Colorado, N. M.

30 Shares Aspinwall Gold and Silver Mining Company, Devil's Gate District, N. T.

75 Shares Washington Copper Mining Company, Indian Bar, Tuolumne Co.

228 Shares Leland Gold and Silver Mining Company, Inyo District, Tulare Co.

90 Shares Owen's County Consolidated Gold and Silver Mining Company, Inyo District, Tulare Co.

50 Shares Crown Point Ravine Gold and Silver Mining Company, Virginia District, N. T.

10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California.

sep28

**Heyer Bros.,** 76 and 78 Federal Street, BOSTON.

**Heyer Bros.,** 406 Battery Street, SAN FRANCISCO.

**HEYER & CO.,**

IMPORTERS OF

**AMERICAN AND EUROPEAN**

**Fancy Goods, Toys & Musical Instruments; also,**

SOAPS, PERFUMERY, HAIR AND TOOTH BRUSHES, Port Folios, Portmanteaus, Ladies' Bags, Photograph Albums, Cutlery, Willow and Parian Ware, Children's Carriages, &c., Our Stock of Violin, Guitar and other Strings is very large. Our Foreign Goods are selected by one of the firm, and the American by the Boston House (established 1834). We have the Sole Agency for

**Hallet & Davis' Boston Pianos,**

**Smith & Bros' Harmoniums, and**

**Treat & Linsley's Melodeons.**

The Hallet & Davis Pianos are each supplied with their Patent Suspension Bridge, which is a decided improvement. It gives a full and clear vibration in the upper octave, producing a quality of tone unequalled in firmness and purity. Our M. Melodeons and Harmoniums are of the best quality, and warranted to give satisfaction. 3m

**MINING CARDS.**

**OWEN'S RIVER CANAL COMPANY.**

Capital Stock ..... \$1,000,000.

10,000 Shares ..... \$100 per Share.

A Portion of this Stock is not offered to the public, and recommended as an investment.

**FULL PAID AND UNASSESSABLE**

Stock, also Assessable Stock, can be obtained of A. J. DOWNER & CO., the authorized Agents of the Company.

406 Montgomery street.

President..... R. S. WHIGHAM.

Secretary..... W. FISK HITCHCOCK.

Treasurer..... MONTGOMERY GODLEY.

Superintendent..... WILLIAM FLEMING.

Engineer..... J. E. CLAYTON.

R. S. WHIGHAM, formerly of Whigham's Mill, Nevada City.

WILLIAM FLEMING..... of San Francisco.

SPEER RIDDEL..... Paying Teller of Parrott & Co's.

ISAAC SWAIN..... of A. J. Downer & Co.

WILLIAM P. PRATT..... of Nash & Fogg.

Office of Company 328 Montgomery street

28ap

**JOHN ARMSTRONG.** WM. P. WILDER.

**ARMSTRONG & WILDER,**

VIRGINIA CITY, N. T.,

**SEARCHERS OF RECORDS**

for Mining Claims & Real Estate.

**RELIABLE ABSTRACTS**

guaranteed at reasonable prices.

**LETTERS OF ENQUIRY**

promptly answered.

**ALEXANDER STOTT,**

**MINING SECRETARY,**

512 Sansome Street, San Francisco.

Secretary of—

HORSE SHOE, Silver and Copper, Monte Diablo.

DANIEL WHESTER, Gold and Silver, Devil's Gate.

GENERAL JACKSON, Gold and Silver, Devil's Gate.

FIGARO, Gold and Silver, Alpine District.

au10

**T. C. Sanborn & Co.**

**STOCK BROKERS,**

No. 630, MONTGOMERY STREET.

**OPHIR SILVER MINING STOCK,**

**GOULD & CURRY MINING STOCK,**

**CHOLLAR MINING STOCK,**

**CALIFORNIA STEAM NAVIGATION CO'S STOCK,**

**BOUGHT & SOLD.**

**NEW MINING AGENCY.**

WE HAVE MADE ARRANGEMENTS WITH A SPECIAL Correspondent at Austin, Reese River, by which any information attainable with regard to any particular mine in that locality can be obtained, for the

**Private Benefit of Parties**

in this City or elsewhere. Our correspondent will visit any mine which may be designated and report upon the general characteristics and condition of the same, the amount of work which may have been done, etc. A reasonable fee will be required for such service. For further information apply at this Office.

EVER & SMITH.

**L. F. LELAND,**

**STOCK BROKER,**

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board

je-29

**AGENCY**

For the Purchase and Sale of

**MEXICAN MINING STOCKS**

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.

je18

WM. FAULKNER.

**New Bedford Copper Company.**

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

**SHEATHING COPPER;**

**BRAZIER'S COPPER;**

**COPPER BOLTS;**

**YELLOW SHEATHING METAL;**

**COPPER AND COMPOSITION NAILS;**

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

MORGAN, STONE & Co

je-29

108 Front Street, San Francisco.

**BUSINESS CARDS.**

**A. C. MORSE,**

**Mining and Real Estate Agent,**

OFFICE—N. W. corner Pine and Silver sts., Auroora.

**HAVING MADE ARRANGEMENTS**

with MINER S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

**Fire Hose! Fire Hose!! Fire Hose!!!**

**J. P. D. WILKINS,**

The celebrated HARNESSE MAKER of Stockton, makes FIRE HOSE, from the best material, and WARRANTED at a trial of the Weber Steam Engine Co., No 3. of the city of Stockton. This Hose is manufactured at his establishment, and known to stand a pressure of 125 pounds to the square inch, as certified by the Chief Engineer.

**ALSO FOR SALE,**

All kinds of HARNESSE and SADDLERY, at the lowest cash prices. REPAIRING done promptly, one door west of the Main Street Stable.

oct12

**WANTED,**

**GOLD QUARTZ SUITABLE FOR**

**CUTTING JEWELRY,**

By FRONTIER A. DEVIERY,

au31

437 Pine street, San Francisco.

**THE EUROPEAN**

**ORE REFINING**

**COMPANY.**

**Quartz Mill and Furnaces, Bryant Street,**

**Crossing Third, San Francisco.**

RECEIVE ALL KINDS OF

**ORES AND MINERALS.**

In large or small quantities, for such Experienced Treatment by the

**LATES EUROPEAN METHODS,**

As may be ascertained by

**CAREFUL ANALYSIS,**

At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.

333 The South Park, and Folsom and Kearny Street Cars pass Bryant street.

au31

**The Pacific Mineral Company,**

**MAKE LIBERAL ADVANCES UPON THE ORES OF**

**COPPER, SILVER, TIN, NICKEL, COBALT, ZINC, LEAD, AND SULPHURETS CONTAINING GOLD.**

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,

je1-1f

Montgomery Street, San Francisco.

**MARTIN & Co.,**

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

**Purchase of Copper Ores,**

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

**HENRY MARTIN,** J. F. GREENMAN,

New York. San Francisco.

San Francisco Post Office, Box 1259.

je 1.

**NORTH BEACH QUARTZ MILL**

and

**REDUCTION WORKS**

Are prepared to work Gold and Silver ores, in large or small quantities.

Working assays made of small lots, and all kinds of ores crushed at short notice.

Our new and complete Machinery, will enable us to give results fully up to the merits of rock.

**WHEELER & THAYER, Proprietors,**

C. C. JONES, Amalgamator

San Francisco, Oct. 13, 1863.



# Mining and Scientific Press.



W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VII. SAN FRANCISCO, MONDAY EVENING, NOVEMBER 30, 1863. NO. 5.

ROUND VALLEY, Nov. 22d, 1863.

MINING AND SCIENTIFIC PRESS: 'Tis not often I write, in fact, I make a poor fist at it—but, with your permission, I will make my grand *debut* in "Bay Circles," as my returned, unsophisticated friend said the other day. I write for three reasons: because this region, so little vaunted, at least deserves notice; because the printer wants copy, and because it is meet that we occasionally throw a few rays of California true light, in the paths of those blinded by Boise, Reese or other distempers. True, these places may be rich, but have we not as good country at our own doors? However, it is idle to reason with those afflicted with the "fever," or "distance lends enchantment to the view."

In these grand old hills, that stretch from the Columbia to the Colorado, and from the Pacific to the Great Basin, slumber countless thousands of veins of gold, and silver and copper, that time and willing hands will yet reveal. You need not go to the far-off Frazer, nor to the wintry heads of the Columbia; nor to the burning deserts of the Great Basin, to find them; but here, on 'Fornia's bounteous soil, is a field so vastly extended, that the yet unborn, will reap fabulous fortunes from their own discoveries.

Fearing that this strain will not suit the "practical," I will turn to local affairs.

Round Valley, from which I write, is situated near the edge of Plumas county, and is of but little consequence as a valley; what little notoriety it does possess, is derived from the numerous gold-bearing quartz ledges in its vicinity. As facilities for working, this country is unsurpassed; timber of every variety and in the greatest profusion, abounds on every hill—and lying spread in full view of every ledge, is Indian Valley, embracing fifty thousand acres of as fine agricultural land as there is in the State.

The Ellis Ledge is the pioneer ledge, nine hundred feet of which is owned by the Round Valley Quartz Mining Company, who have two fine quartz mills in operation, one with twelve and the other with sixteen stamps. They are said to be "doing well;" a proof that "there is something in it," is that the mills have been operating successfully for nearly two years. They have excavated to the depth of two hundred and fifty feet.

The ledge of first importance, however, is the Blood ledge, owned by Bolinger & Co., who have a twenty-four stamp mill in full operation; it is yielding most handsomely; it does not only good to see the glitt ring bullion every clean up.

Next comes the Waterworth ledge, at Granville, two miles distant, which is truly a master ledge, and when worked with ample machinery, I believe will be equal to the best. Waterworth & Co. originally owned the whole of the ledge, but sold one-half to Messrs. Blood & Harvey, who incorporated under the name of the "Indian Valley Quartz Mining Co." In addition to those named there are four other quartz mills in operation, and all of them seem to be doing something. Gold is not all we find in this region; copper is also found in abundance. The Superior Ledge, owned by Major Bidwell & Co., situated a short distance from here, promises to yield with Copperopolis; also the Genessee Valley Gold and Copper leads are ranked among the best.

Space will not allow me to particularize, but in future I contemplate giving you a geographical view of the country here, as also a minute description of the working and appearance of the several mines, adding any further facts that may present themselves.

BENEDICT.

AUSTIN, N. T., Nov. 20, 1863.

MR. EDITOR: I have now been in this mineral kingdom about ten days, but have not yet availed myself of any opportunity to visit the reported good ledges in this vicinity. We have had some little snow and rain, but all is fair again, and the ground is almost destitute of any snow, and all is lively in the haste to get our winter shelters completed. I bought lumber to build me a small house, but speculation claimed too much for a building lot; therefore I piled up my lumber and hired me a room until I can satisfy myself about which is to be the great city of Lander county, and whether the mines will warrant half the expectations placed in them.

There seems to be four or five mills pretty nearly ready to run, and some of them doing now a smashing business. I noticed this morning our second saw mill in operation, cutting from our short nut pines, good framing timbers and roof lathings, much cheaper than buying them at \$400 per m. ft. I meet with none who do not seem to have the fullest assurance that this is a great mineral section, and that the next season will prove a harvest of much wealth. When we look at the investments being made by mill and mercantile companies, it argues strongly for their confidence. I will endeavor to give you my impressions of mines, &c., here, very soon—just at present I am very busy roofing a large building, and this contract completed, I will expect to take notes on the hill side.

Yours, truly,

B. W. C.

MERCURIAL VAPORS.—A writer for *Harper's Magazine*, in giving a history of the celebrated Almaden mine, gives the following description of the deleterious vapors arising from the works:

"One of the most curious circumstances connected with the New Almaden mine is the effect produced by the mercurial vapors upon the surrounding vegetation. Despite the lofty chimneys, and the close attention that has been devoted to the secret of effectually condensing the volatile matter, its escape from the chimneys withers all green things around. Every tree on the mountain side above the work is dead, and some of more sensitive natures further removed exhibit the influence of the poison in the shaken and blanched foliage; but these effects do not extend to any great distance. Cattle feeding within half a mile of the hacienda, sicken and become salivated; and the use of the waters of a spring rising near the works, is guarded against. It does not, however, affect a mineral spring near by, which possesses the peculiar qualities of soda or Congress water. The workmen at the furnaces are particularly subjected to poisonous fumes. These men are only able to work one week out of four, when they are changed to some other employment, and others take their places for a week. Pale, cadaverous faces and leaden eyes are the consequences of even these short spells; and any length of time continued at this labor effectually shortens life, and impregnates the system with mercury.

In "Reid's Handbook to Newcastle," the particulars are given of the raw material consumed per annum in the alkali works of the kingdom:—salt, 255,600 tons; coal, 951,000 tons; brimstone and chalk, 380,500; pyrites, 264,000; nitrate of soda, 6,300; manganese, 3,300; timber for casks, 3,300; total, 1,834,000 tons. "Nearly one-half of these materials are worked up in the neighborhood of Newcastle. The salt employed is almost exclusively the produce of the Cheshire mines; but at the Felling works rock salt from Ireland is dissolved and boiled down by waste heat from coke ovens.

INGENIOUS CALIFORNIA INVENTION.—Mr. J. S. Henning, of this city has made application for a patent for an ingenious invention of a machine or contrivance for recording music as it is played upon an instrument. The principle of this invention will not be made public until the patent is secured. The prime agent, is electricity, produced by a novel method, differing from a galvanic battery heretofore known. Mr. Henning was also the originator of a self-reporting telegraph instrument, patented by Amos Kendall, and is the party who proposes to build a telegraph fire-alarm in this city during the present year, if the City Fathers so direct. Mr. H. has devoted much attention to the study of electricity, especially in regard to its application to economic purposes.

"A SUBSCRIBER," writing from Diamond Springs, is anxious that our "Traveling Correspondent" should visit the mines of El Dorado county, and report upon them, as he is now doing upon those of Calaveras. It is our intention to keep one correspondent constantly in the field, whenever the roads are in proper condition for convenient travel. We fully agree with "A Subscriber" as to the importance of such a course, and trust he may soon have the pleasure of a call from the correspondent of the PRESS.

LARGE SALES OF MINING GROUND.—L. A. Booth and Gross & Lombard, have lately sold to the Eclipse Mining Company, ten feet of ground in what is called "Gold Hill proper," for the sum of \$55,000. This ground, though steadily worked for the past three years, now shows more ore than ever.

It is reported that the Washington District, which lies about forty miles to the south of Austin, Reese River, is proving rich and extensive.

THE OLDEST ROSE BUSH, in the world is supposed to be at Hildesheim, in Hanover. It was planted in the ninth century by Louis the Pious, and in 1078 Bishop Hezilo had a wall built around the tree to protect it. It has lately put forth new shoots from the old roots, one of which is twelve feet high and nearly an inch in diameter.

THE STOKTON *Independent* thinks that in two years Washoe will contain 200,000 people, and be dependent on California for breadstuffs.

LETTER FROM ESMERALDA.—We would call particular attention to a very excellent letter from Esmeralda, which will be found upon our second page.



## ESMERALDA.

The mining district known as Esmeralda is situated mainly in the county of the same name in Nevada Territory but running over the line, separating the Territory from the State, into Momo County, California. Aurora, the municipal town in the district, is nearly due east from San Francisco, a distance of 250 miles. By the Route mainly traveled heretofore, *via* Sacramento, Placerville and Genoa, the distance is 380 miles. A good wagon road, however, is being constructed across the mountains from Sonora, Tuolumne County, which was within two weeks of completion when the snows prevented the further prosecution of the work until Spring. When this road is completed Aurora will be *within two days of San Francisco*, by steamboat and stage. The geographical position of Aurora is favorable for growth, independently of its mineral resources. It is in a direct line from San Francisco to Austin, Reese River District, shortening the distance about 200 miles. The Sonora road completed, supplies for Reese River, Excelsior, Silver Mountain, Monitor District and Owen's River will naturally find their destination through Aurora, that being the nearest and best route to all the places named.

## CLIMATE.

Much misapprehension seems to exist in relation to the climate of Esmeralda. That there is much sickness and many deaths occur for the population is true, but most of the instances of mortality are traceable to other causes than the unhealthiness of the climate. With the same conveniences and care the climate will probably prove as healthy as that of San Francisco. Substantial improvements, adapted to the climate, are constantly being made, and with these there can be little doubt but that the health of the district will improve, which even now will not suffer in comparison with any other one east of the mountains.

## AS A MINING DISTRICT,

Esmeralda is regarded by many as under a cloud, and the earnest enquiry is repeatedly made; "Do you think the mines will ever be successful?" or "Is the story of the uncouth wealth of Esmeralda only a golden dream, destined to disappoint all who have cherished the hope of remuneration for their toils and sacrifices?" These enquiries indicate a want of information in reference to the work already performed and its encouraging results, notwithstanding the numerous disadvantages which the district has suffered. The discovery of gold and silver bearing quartz here was made by a few adventurers some four years ago. Pitching their tents in a gulch half a mile south-east of the present city of Aurora, their attention was attracted by the heavy quartz croppings on the sides of Silver and Middle hills. The discoverers are said to have been without capital and could only stake out their claims and wait for something to turn up. They were more than a hundred miles from any settlement, the geography of the country was little known, they had no supplies, no roads, and the surrounding country presented only a grand desolation, whose hills and gulches had never echoed to the voice of the white man. The report which these discoverers made soon attracted a large number of the same class, so that before any considerable capital was enlisted a large proportion of the best ledges had been appropriated by men who had not the capital, if they had the energy to develop them. This fact accounts for the comparatively slow progress, made in mining operations in the district.

## THE QUARTZ MILL.

Another occasion of delay and disappointment arose from the class of mills at first erected. However much expense and time these projectors may have devoted to them they were utterly inadequate for crushing the rock and separating the metals. Some four or five of the primitive structures still stand, as silent monuments of the folly of attempting to force the bullion from the rock, however rich, without proper appliances.

There are now seven mills in the district, capable of doing satisfactory work, embracing an aggregate of 86 stamps, only six more than the Gould & Curry are now running. These mills are all busy, night and day, nearly all of them on two claims—the Pond and Real Del Monte—the only ones in the district fully opened; the latter producing \$100,000 per month. The whole amount, from all the mills, falls a little short of \$200,000 per month. Three additional mills are in process of erection—the Real del Monte is nearly or quite ready for operation, having a battery of 30 stamps, and in al-

its appointments equal to any mill east of the mountains. The Antelope, with twenty stamps nearly completed, and the Durand, just commenced. All three are to be first class mills.

## WILD CAT SPECULATIONS.

Another serious drawback upon the development of Esmeralda Mining District, was occasioned by the graceless wild cat speculations of last winter. It seems difficult to decide whether to be amused or indignant at this phenomenon called "*Wild Cat*." The sellers were not honest or the buyers were not shrewd. If it were allowable to manage a little, it perhaps might be said that the declaration that they who *will* be rich fall into a snare, was exemplified in both buyer and seller; the latter being snared by the temptation to dishonesty and the former into loss by his credulity. But cats, whether wild or tame, like dogs, must have their day, and the wild-cat speculation has risen, flourished and declined, leaving the seller with the reputation of having lost his conscience and the buyer with the consciousness of having parted with his money without receiving an equivalent in value.

## GOOD FROM EVIL.

But it is said there is no unmixed evil in the world, and so it seems likely to prove in this case.

The decline in stocks has induced holders to develop their ledges. That Esmeralda Mining stock will come up at no distant day may be regarded as mainly certain. But they will rise on their own merits. The time and rate of advance will depend on the labor and capital devoted to taking out and working the rock.

## THE ROCK IS RICH.

Fifty-two consecutive assays taken from the books of Van Night & Winchester's assay office, the record of assays made from rock taken from the different claims in Esmeralda district during this year, show an average of \$445 per ton. This, of course, was most of it fair selected rock, and cannot be regarded as a fair estimate of the product of unassorted rock. But the lowest estimate we have heard of, the product of the rock crushed during the last six months is \$75 per ton, and a large proportion of it has exceeded \$100. One company, the Pocasset, before its consolidation with the Crocket, was offered \$110 per ton for their rock, at the mine, but declined the offer. The Pond, the Real del Monte, the Antelope, the Utah, the Chemung Tunnel, Durand, Brewster, Middle Hill Tunnel, Manita and numerous other claims, so far as developed, are equally promising and will in due time blow their own trumpet.

But, the inquiry is repeated, "If the Esmeralda mines are so rich, why do we not receive the bullion?" Well, sure enough. Why? For the same reason that the Feather River does not furnish any water for the bay of San Francisco. All its resources are emptied into the Sacramento, and that river receives all the credit. Esmeralda bullion falls into the Washoe current at Genoa and comes down as bullion from Washoe.

But what about the Wide West? Honestly we cannot tell. It is apparently a great swindle or a great fizzle; and yet, from all the facts accessible to an outsider, a Philadelphia lawyer could not decide which it is, or whether either. The story goes that in shifting Superintendents and hands the original Johnson ledge, from which their rich ore was obtained, was lost and though they have looked for it with lighted candles, for many weary months, no trace of it is visible. So to pay expenses the magnificent mill is crushing Del Monte rock, and the company are still hopefully searching for the lost treasure. It is to be hoped that the search will be more successful than the one made in the Polar regions for Sir John Franklin, though some cherish the belief that the game is to "freeze out," and others, that the whole thing is effectually frozen up as the distinguished northern adventurer himself.

J. B. SAXTON.

**A LOYAL AND USEFUL CITIZEN.**—Mr. T. C. McCaffrey, of Knoxville, Tenn., served three months under General Jackson, thirty-two months in the Mexican war, twelve months in the present war, and has sent *eleven sons* to the Union army, four of whom were killed before Vicksburg.

**IRON-CLADS.**—There are *thirty* iron-clads now in the course of construction from the plans of Ericsson. There are in addition to these, a large number of different construction, now upon the stocks or just launched.

"The American Tea Company" was chartered by the Legislature of Pennsylvania, it having been represented by the tea-plant grows indigenously upon portions of American soil, and that they possess most of that soil. The company have employed Dr. Spencer Bonsall, an man of experience and character, to examine the American tea-plant, and he speaks most confidently and encouragingly as to the success of their undertaking. Dr. Bonsall is a gentleman of good reputation in the scientific world, and for six years he held the responsible position of superintendent and chief manager upon the lands in India of the Assam Tea Company of Calcutta and London. He has reported specifically on the present undertaking. He declares that the tea-plant exists in Pennsylvania and Western Maryland beyond all doubt. "It grows indigenously," he states, "in the greatest luxuriance and abundance, in the places that I have visited, limited, however, to those localities which afford the peculiar soil indispensable to it, as is the case in China, Assam and Japan." The character of the plant differs somewhat from the Chinese variety, but the difference is not greater than might be expected from the difference of climate and soil of the two countries. The leaf—and this is the important point—is almost identical with some of the varieties from which the best tea is made in Assam; and Dr. Bonsall expresses his belief that tea equal to any brought from China to this country could be made from this plant. He thinks that the specimens of both black and green teas that have been prepared from it should satisfy any unprejudiced mind that they will bear favorable comparison with imported teas; and their appearance and quality will improved as the manipulators become more expert, the present process being rude.

## SUGGESTIONS ABOUT FOREIGN PATENTS.

American inventors should bear in mind that, as a general rule, any invention which is valuable to the patentee in this country, is worth equally as much in England and some other foreign countries. Four patents—American, English, French and Belgian—will secure an inventor exclusive monopoly to his discovery among one hundred millions of the most intelligent people in the world.

Models are not required in any European country, but the utmost care and experience is necessary in the preparation of the specifications and drawings.

When parties intend to take out foreign patents, engravings should not be published until the foreign applications have been made.

The facilities of business and steam communication are such, that patents can be obtained abroad almost as easy as at home. The majority of all patents taken out by Americans in foreign countries are obtained through the MINING AND SCIENTIFIC PRESS PATENT AGENCY. Having established agencies at all the principal European seats of Government, we obtain patents in Great Britain, France, Belgium, Prussia, Austria, Spain, etc., with promptness and dispatch.

**CAUTION.**—It has become a somewhat common practice for agents located in England to send out circulars soliciting the patronage of American inventors. We caution the latter against heeding such applications as they may otherwise fall into the hands of irresponsible parties, and thus be defrauded of their rights. It is much better for inventors to entrust their cases to the care of a competent, reliable agent at home.

While it is true of Most European countries that the system of examination is not so rigid as that practiced in this country, yet it is vastly important that inventors should have their papers prepared only by the most competent solicitors, in order that they may stand the test of a searching legal examination; as it is a common practice when a patentee finds a purchaser for his invention, for the latter to cause such examination to be made before he will except the title.

It is also very unsafe to intrust a valuable invention to any other than a solicitor of known integrity and ability. Inventors should beware of speculators, whether in the guise of patent agents or patent brokers, as they cannot ordinarily be trusted with valuable inventions.

**EELS IN CANALS.**—The well-known French author, Edmund About, has proposed that the French Government shall stock all the canals in France with eels, both as a source of revenue to be raised on grants of the right to fish, and of a cheap and wholesome food for the poorer classes of the people.



**SUGAR FROM SNAKES.**—Sugar has been obtained from the skins of snakes by a French chemist, and the process is given in the daily journals of Paris.

A curious observation respecting the rapidity of eagles in their flight, has just been made by a traveler crossing the Grison Alps. An eagle, in flying from one mountain peak to another, at a height of eight or nine thousand feet, performed the distance of five miles in five minutes.

THERE has already been received as computation under the enrollment act 5,500,000, which sum, and all moneys hereafter realized from this source, are to be expended in bounties for enlistments.

## G. E. MOORE,

Assayer and Analytical Chemist,  
No. 612 Sacramento Street,

HAVING ESTABLISHED A CHEMICAL LABORATORY, furnished with every requisite for delicate Analytical work, is prepared to execute the Assay and Analysis of Ores, Mineral Waters, Gunnes, etc., with accuracy and dispatch.

### REFERENCES:

Prof. J. D. Whitney, State Geologist, San Francisco.  
Alson & Co., San Francisco.  
Sather & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento.

sep14

## ASSAYS!

Promptness and Accuracy Secured  
BY THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,** (From Europe.)  
24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. j36  
"HINTS FOR PROSPECTORS" Free by Post.

## RIEHN, HEMME & CO., ASSAYERS.

Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.

Assays Made of ores, Minerals  
and Metals.

### REFERRED WITH PERMISSION TO

Messrs. F. PARROT & CO., Messrs. ALSOP & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.

CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
Assaying, also in Mineralogy and Chemistry as far as re-  
quired to become a practical Assayer.

### AGENTS WANTED.

We want a good Agent in every city, town and settle-  
ment, on this Coast. Applicants will send their names  
with reference, when specimen numbers of the **Min-  
ing & Scientific Press** will be forwarded to them,  
and their names added to our published "List of Agents."  
EWER & SMITH.

WM. H. MEAD, THEODORE VAN TASSEL.

## MEAD & VAN TASSEL, HATTERS,

Montgomery st., cor. of Commercial,  
SAN FRANCISCO.

TO OUR FRIENDS AND THE PUBLIC GENERALLY.  
Having Purchased the entire interest of Messrs  
FISHER & CO., in this city, we shall, on the 1st day  
of May assume the management of the

### HAT EMPORIUM,

so long conducted by that firm.

Mr. WILLIAM H. MEAD, for the last seven years Sales-  
man with Messrs Fisher & Co., respectfully solicits a con-  
tinuance of the patronage so long and liberally bestowed  
upon the old House, feeling entire confidence in our ability  
to suit in every particular.

Mr. THEODORE VAN TASSEL, for eight years with  
Messrs Le Gay & Co., would be pleased to see his friends  
at his new place of business.

The long practical experience of Messrs Mead & Van  
Tassel in the Trade justifies them in saying that their  
work cannot be excelled either in finish or durability.  
Having perfected arrangements, we shall be in constant  
receipt, by every steamer of soft goods of the very finest

French and American Manufacture.

Our Stock now on hand is superb.  
Call and examine, and judge of the merits of our claim  
to the title of "LEADERS OF FASHION."  
Respectfully,

MEAD & VAN TASSEL,  
Montgomery street, cor. Commercial,

nov2

## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of the  
most Effective, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
class of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

### METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed  
to combine all the improvements which the experience  
of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent, more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1880, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps,

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing complete about 6,000 pounds,  
and the Five Stamp about 7,000. The Mortar Bed being  
cast in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—ranging from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

### MANUFACTURED ONLY BY

GODDARD & CO.,

At the Pacific Iron Works.

SAN FRANCISCO.

on 125 to 136 First street, and 126 to 144

Fremont street.

## MINING & SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND  
SCIENTIFIC PAPER ON THIS  
CONTINENT.

THIRD YEAR! VOLUME VI.—NEW SERIES!

A new volume of this extensively circulated paper  
commenced Sept. 11, 1882. It is intended that every  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits,  
together with several original engravings, of new inven-  
tions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together  
with the interests of Science, Arts, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader; and it is the intention of the pro-  
prietor to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published

### The Inventor!

Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having had  
great experience as Patent Agents, together with facili-  
ties at Washington that enable them to obtain Patents  
with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its col-  
umns will from time to time contain original engrav-  
ings of new machines and inventions, together with a  
large amount of reading matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.

### The Mining Interest!

Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of Min-  
ing Stocks, new inventions of Machinery adapted to last  
purpose, and of everything generally that may be of ser-  
vice to the Miner.

### To Chemists, Architects and Millwrights.

This journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of infor-  
mation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plan-  
ters will not be neglected, engravings will be given of  
agricultural implements, and the farming interest gen-  
erally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum;

### Club Rates.

Five Copies for Six Months, \$8.

Ten Copies for Six Months, \$16.

Twenty Copies for Twelve Months, \$30.

Names can be sent in at different times and from  
different Post-offices. Specimen copies will be sent  
gratis to any part of the country.

### EWER & SMITH, Publishers,

Room 57, Government House, Corner of Washington  
and Sansome streets, San Francisco.

### I. C. E. KLEPZIG & CO.,

## GUN MAKERS,

...AND...

DEALERS IN GUN MATERIALS,  
733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.  
Gilding, and also Silver Plating, by E. Ekland. je21

## LEANDER RANSOM, Civil Engineer

## SURVEYOR,

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

### ALSO

## STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL  
LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE, 328 Montgomery streets. oct-3

## D. NORCROSS,

Masonic Temple, No. 6, Post Street.

Military Goods of all Descriptions.

Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.

aug 17

## PEOPLE'S OPPOSITION Steamship Line!

Special Notice.—The  
Line have been withdrawn from the Ni-  
caragua Route until further notice.

### GREAT REDUCTION IN RATES !!

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
J. H. BLETHEN,.....COMMANDER

Will be dispatched for PANAMA

From Mission street Wharf.

FRIDAY, - - - - - NOVEMBER 13, 1882

Punctually at 9 o'clock, A. M., on

Connecting at Aspinwall, by the Panama Railroad, with  
the Splendid Steamship  
**ILLINOIS** - - - - - 3500 Tons.

The Moses Taylor, since her last trip has undergone  
the most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins enlarged, refitted and  
reupholstered throughout—making her accommodations equal  
to any Steamer on the ocean.

For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

## BOOK KEEPING, Penmanship

AND  
COMMERCIAL CALCULATIONS,  
Taught by J. S. LUTY

PRACTICAL ACCOUNTANT,  
305 Montgomery Street, Corner of Pine.

### TO QUARTZ MINERS.

All persons interested in Mining Ma-  
chinery are invited to call at Donahue's Foundry and  
examine my improved Amalgamator. It is unquestion-  
ably superior to anything now known for amalgamating  
Silver and Gold. It works 1000 pounds at a time, and  
will amalgamate over three tons a day. By the motion  
of the revolving muller, the pulp is drawn through its  
centre and passes under it, between the grinding sur-  
face, to the circumference: from whence it passes again  
over the muller to the centre, through the holes and  
between the grinding surface to the circumference as be-  
fore. Thus a constant circulation of the pulp is kept up,  
bringing the particles of ore again and again under the  
muller, and reducing the whole mass to an impalpable  
powder.

No quicksilver lies between the surfaces to be ground,  
but at the circumference and centre of the pan where the  
metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in De-  
cember last, and all persons are again warned against  
purchasing machines made at the Miners' Foundry called  
"Wheeler's Amalgamator," as they are an infringement  
on my patent, and a suit is now pending in the U. S. Cir-  
cuit Court against the parties infringing. My Amalga-  
mators can be seen running at Donahue's Foundry, where  
all can judge of their operation and the very superior  
style in which they are being manufactured.  
sep21 THOMAS VARNEY.

## PATRONIZE HOME MANUFACTURERIES!!!

James Longshore,

Trunk and Valise Manufacturer,  
307 Sansome Street, under Tehama House. Trunks and  
Valises, Wholesale and Retail, Fine Sole Leather Trunks,  
Valises, and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
aug x

### APARTMENTS.

FURNISHED APARTMENTS, WITH, OR WITHOUT  
Board, at 1018 Powell Street, between Clay  
and Washington Street. Persons desirous of a respectable  
home will do well to apply. j36

## FOR SALE.

PATENT PRESSED RUSSIA IRON MINING PANS,

Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frains and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipe  
Cooking Stoves and Heating Stoves  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

## UNEQUALLED MONITOR COOKING STOVE Or RANGE,

FOR HOTELS.

To which we call particular attention.

je-29

TAY, BROOKS & BACKUS.



**SONORA AND MONO ROAD.**—The work upon this road, which is alluded to by our Esmeralda Correspondent to-day, has been suspended for the season, but will be resumed at the earliest possible moment. Persons who came over the route within a few weeks past (before the late fall of snow,) inform us that the road was then in fine condition, and only about six or seven inches of snow on the summit. The workmen employed on the Patterson contract had all left the mountains, and Leavitt's and Hot Spring's stations on the other side, were deserted. The new road, so far as it extends, is admirably constructed. The traveler can travel mile after mile on a broad, smooth road, almost as level as a floor. When completed, this will be by far the best mountain highway in California or Nevada. The Commissioners, having finished their labors for the present, made their report last week.

**PROCESSES OF SILVER AND GOLD EXTRACTION (WASTE?)—BY GUIDO KISTEL—SAN FRANCISCO.**

In fulfillment of our promise of the week before last, we present some results obtained in Victoria, Australia. The accounts derived from the *London Mining Journal*, have more than the usual amount of authenticity as they are connected with litigation in one case, and with dividends in the others. Mr. Goulding is the inventor of an amalgamator of the Wheeler Pan class. It is thus described:

"Mr. Goulding's machine does not materially differ from an ordinary arrastra; but being constructed of iron, and in segments, is capable of removal with far greater facility. The great improvement, however, appears to consist in the mode of feeding; by attention to which, Mr. Goulding has succeeded in obtaining very excellent results. The pan is a circular one, with a round bottom; and the drags which are used as a substitute for the ordinary stones are cast to fit. The segments are bolted together, and the joints made tight by india-rubber, or other suitable washers; and the drags being placed in position and attached to the arms, the apparatus is ready for operation. Mr. Goulding thus describes the mode of using the machine:—Put in slowly 5 cwt. of pulverised quartz from the stamps, and add as much water as will reduce it to the consistency of mortar; then pour in 10 lbs. of mercury, and let the machine work for one hour, at ten revolutions per minute; then open the trap-hole in the pan, and let the contents be discharged into a wooden trough, from whence the ore is carried off by a stream of water to a "shaking-table," in which the waste is separated from the quicksilver and amalgam. This operation is opposed to the old method of feeding and discharging continuously, but the results are at least double what may be obtained by any other way of working the same machine. The amalgamators may be worked in tiers, one above another—that is to say, in parts, two machines being worked by the same vertical shaft; and, with proper working, about ten of the pans may be worked by a 20-horse engine. The dry grinding operation should precede the wet amalgamation process. The drags are grooved for amalgamating, and without grooves for the dry grinding. The long mooted question of getting all the gold is, in Mr. Goulding's opinion, solved in this pan, and he claims that each pan can amalgamate 5 tons in 24 hours; and with ten pans, which would give 50 tons a day, or 300 tons a week, the working expenses, including fuel, management, labor, &c., would be less than 2s. per ton. Some of the machines have been in use at Stieglitz for some time, and have given satisfaction."

Mr. Bland the resident director of the Port Phillip Co. reports that—twenty tons of roasted blanket sand which according to an assay previously made, yielded 1 oz 7 dwts and 16 grs. to the ton, [probably 2240 lbs.] yielded in Messrs. Rob-on & Lancashire's arrastra only 15 dwts—20 tons of unburnt blanket sand which according to previous assay yielded 3 oz 6 grs per ton, were reduced with a result of 18 dwts. per ton. Mr Goulding claims that this arrastra is identical with his own.

The Independent Company paid a dividend of 28½. 8s. per share for the month, from 1009 tons of quartz, which yielded only 151 ozs. of gold, or a fraction over 3 dwts. to the ton.

The New Perseverance Company, on the White Horse, paid all working expenses, and placed 160½ to the credit of company, from a month's crushing of 1600 tons of quartz, which gave only 119 ozs. of gold, or about 1½ dwt. to the ton. The quartz was taken from an open cutting about 40 feet deep.

Mr. Fox, President of the Miners Association at Helstone, is our authority for stating that a jiggling machine (of Mr. Hunts) had extracted 12 grs. of gold—the whole quantity the stuff contained—from a ton of sand brought from Van Dieman's Land. Let it be observed that this is little more than 1 part in 100,000. If this be true, jiggling for gold is as good as assaying, in Cornwall, at any rate. If we now turn to the book whose title heads this article—a diligent search will disclose the following matter for comparison.

	Smith's Process common 4-foot Pan.	Wheeler's 4-foot Pan.	Hepburn's 4-foot Pan.
Charge...	50 lbs.—(p. 68). 150 :: (p. 76).	750 lbs.	1000 lbs,
Time....	5 to 6 hours.	3 hours.	4 tons pr 24 hours.
Yield....	50 to 60 per ct. of total silver.	60 to 70 pr ct, p. 69. "At least 10 pr. ct. more than com- mon Pans." p 85.	No estimate
Quicksilver used....	No statement.	50 lbs pr. charge.	No statem't
Loss in Quick- silver....	Unascertained.	Unascertained.	No statem't
Steam for { heating. {	{	{ 1-16 cord of wood } { per 24 hours- }	{
Power requir- ed.....	No statement.	No statement.	2½-horse.
Loss in silver.	40 to 50 pr ct.	30 to 35 pr ct.	No statem't
Samples, Page 85 [1.] Slimes, Pages 85 and 82 [2.] Chemicals Pages 84 and 110 [3.] Adhesion of amalgam, Page 87, [4.]			

1. "The difficulty in stating the loss is chiefly found in the attempt to get a reliable average sample for the assay, especially if wet crushing is going on. The sulphurets and gold are always concentrated in the vats, where the ore falls in from the battery, and every inch in it shows a different amount of silver. The next vat shows the same difference, having, besides, already so much slime that a mixing for the purpose of having the metal equally distributed in the mass, is impossible without drying.

The Calculations on the superiority of Wheeler's pans, at least to the present date, are derived from the comparative yield and the appearance of the tailings, according to which these pans seem to yield at least ten per cent, more than the best common pans.

2. A great difference as to the result will be found in a comparative working of the finest sediment (the slime) which glides between the miller and the common pans almost motionless, as if it were one mass, while in Wheeler's pans the slime is forced under the miller with the same speed as the ore.

3. This is also the reason that it seems as if the quicksilver were protected by the chemicals against being ground to scum, because the black powdered quicksilver is less visible.

Purposely applying a very low temperature, the amalgam, apparently pure, turned black after retorting, and consisted mostly of iron.

4. It occurs often that a great part of the amalgam deposits in the amalgamating pans. At other times, no deposit of amalgam takes place in the pan, or one pan may retain as much as one hundred pounds, when another has none at all. It seems that this appearance depends on a variable electric condition of the iron."

We regret to say that the data on which this is stated as to the effect of electricity, are not given—thus it has little scientific value as it now stands. We, ourselves, however, have observed in a pan in which an electric current has passed through the quicksilver, that the amalgam froze on to the spaces between, and not covered by, the guide blades.

We cannot conclude these comparisons better than by quoting from page 116:

"At Mansfeld, where Ziervogel's method is practiced, in extracting silver from copper matt the loss of silver, according to the recent accounts of Dr. Heinbeck, is 7.06 per cent. in roasting and 1.20 in extracting the silver, making the total loss of 8.25 per cent."

It stands thus, then: California and Nevada Miners! you are wasting from 20 to 40 per cent of your silver over necessary loss, and yet you are told that you will never adopt "precipitation" which saves it.

**STARS.**—The number of variable stars hitherto observed is about eighty, and it is the opinion of some astronomers that every star under the third magnitude is variable. One of these stars a few years ago, apparently disappeared altogether, but about a year ago it re-appeared suddenly, with more effulgence than ever.

**LENGTHENING THE ERIE CANAL LOCKS.**—The *New York Post* says: "The engineers on the Erie Canal are making a survey for the proposed extension of the locks. The surveys and estimates are for locks two hundred and twenty-five feet long between the gates, and wide enough to pass boats twenty-six feet wide—the estimate to be presented to the Legislature on the first day of its next session. It is supposed that locks of these dimensions will enable boats of five hundred tons burden to navigate our canals, and also to pass iron-clad gunboats into the lakes if required. Some idea of the size of these new structures may be obtained when it is remembered that the present locks are only one hundred and ten feet long between the gates, and seventeen feet four inches in the bottom."

**WASHOE GRANITE.**—There is a great deal of this material used in building in Virginia, many of the latest fire-proofs having their window and door sills and cappings, and steps formed of it. It is a very excellent material for building purposes—being light in color, and much softer than the granite in California. It is but little more difficult to cut than ordinary sandstone, but becomes very much harder on exposure. Correctly speaking, it is not a true granite, as it contains no mica—its components being quartz, hornblende and feldspar.

**ALLEGED RICH STRIKE.**—The *Virginia Union* of November 5th, says:

"We were yesterday shown a fine specimen of rock, taken from a ledge just struck upon the Pride of Washoe. It was of a singular character, being composed of iron pyrites and rich sulphurets of silver. The mine is situated in South Spanish ravine, on the northeast side of Mount Davidson. A tunnel has been run into the hill, and at a distance of one hundred and fifty feet from its mouth, a shaft one hundred feet deep sunk. From the bottom of this shaft a drift was run sixteen feet north; then a straight shaft was sunk eighty-five feet, and at that depth this rock was struck. The ledge extends clear across the shaft, which is six feet wide; how much larger it is is not known. This point is about two hundred feet below the surface.

**FINE COPPER ORE.**—The first shipment of ore—10 tons—from the Eureka Consolidated Company, on the Green Ledge, near the Zinc House, Nevada county, arrived in this city on Friday last, and can be seen at the Pacific Warehouse; this is one of the finest lots of sulphurets which we have ever examined. We understand the company has a very heavy vein of this ore, and are just beginning to take it out. They are now raising about five tons per day.

**MEXICAN MINES.**

San Marcial appears to have been drawn from the market, owing to the excellent prospects of the Company. Their mill has been started and works satisfactorily. A large quantity of good ore is stated to be now on the surface.

The Tecoripa Company, it is said, have taken out considerable ore. Their mine is believed to be a promising one, and a mill is to be erected at once.

The Providencia, a portion of the famed Santa Juliana vein, is being reopened and occupied by new owners. The latter mine, tradition says, yielded \$3,000,000 in seven years.

The Cruzecitas Company are at work in the erection of reduction works, etc. The requisite machinery is now at the mine, and the mill will, it is supposed, be in operation within a few months. A large force is employed in enlarging their shaft and in extending drifts.

The Refugio Company is very favorably spoken of. Ample machinery has been sent to the mine. Two veins of gold and silver bearing ore are to be opened immediately.

In the vicinity of these mines and near the old mining town of Jesus Maria, there has been found lately a Quicksilver lead, said to be very valuable. It is represented that at a depth of 18 feet the vein of cinnabar is more than three feet in width, averaging about 25 per cent. The attention of capitalists will doubtless be called to this important discovery so soon as a thorough test of the mine has been made. Meanwhile the work of development is to be vigorously prosecuted.

—Messrs. Coffey & Risdon are constructing a large and substantial brick building, on Market street, for their boiler works.







A GHOST CLUB has been organized in London, having for its object a research into the possibility of "ghosts," or the appearance of the spirit upon earth, after death. That the club is in earnest, may be gathered from the fact that the committee advertise for a "haunted house," one whose reputation is well authenticated. The "Londoners," are looking with much interest for the result of the proposed researches of this association.

**WOODEN VS. IRON SHIPS.**—An ordinary iron ship of 1,000 tons internal measurement will carry a dead weight cargo of 1,500 tons, while a wooden ship of the same internal measurement will carry only 1,463 tons, 27 tons, or two per cent less than the iron ship. The iron ships will weigh 775 tons, while the wooden ship weigh 1,000 tons. The former displaces 2,275 tons of water, while the latter displaces 2,473 tons.

**THE SWIFTEST STEAMBOAT** ever built is said to be the Mary Powell, running between New York and Poughkeepsie. She lately made the run between the two cities at the rate of 25 miles an hour, running time.

**THE POLE** attracts magnets, but our glorious country attracts thousands of Poles.

**TABOR & HILL**, Real Estate Agents and Stock Brokers, place their card in our columns to-day. Messrs T. & H. are members of the S. F. Stock & Exchange Board and San Francisco Board of Brokers. Any business entrusted to their hands will be promptly and faithfully attended to. They may be found at 502 Montgomery street.

**MINING AGENCY.**—By reference to our advertising columns it will be seen, that we have made arrangements to obtain special information, through a resident correspondent, with regard to any particular mine at Reese River. Parties in the city about to invest in "feet" in that neighborhood, and not having time or caring to incur the expense of visiting the locality, will do well to avail themselves of the opportunity hereby presented securing reliable information, previous to investment, at a moderate cost.

Persons already holding "feet" and desirous to learn through a disinterested source the actual condition of the mine in which they may be interested, will do well to embrace the opportunity here presented of securing the desired information.

We shall establish agencies similar to the above in all the principal mining districts, at an early day.

SAC TADOR.

JOHN HILL.

## Tabor & Hill

**Stock Brokers & Real Estate Agents,**  
502 Montgomery St., cor. Sacramento,

Buy and Sell Mining Stock on Commission. Are members of the San Francisco Stock & Exchange Board, and of the, San Francisco Board of brokers. nov23

### Giffards Injectors,

FOR SUPPLYING OILERS WITH F.E.D WATER without Pumps. No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODDART, Agent,  
je22 Cor. Pine and Front Sts., San Francisco.

### Owens River Canal Company.

#### FOR SALE,

FOR ACCOUNT OF THE COMPANY, 7,000 SHARES OF the above stock, at \$1 per share. It is confidently presented to the public as the best investment, for the price, now offered in this market.  
Office of the Company No. 328 Montgomery street.

#### REMOVAL.

**OFFICE OF THE PACIFIC METAL**urgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers, or Silversmiths' sweepings reduced or purchased.

**COPPER ORES**—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

#### GENERAL NOTICES.



### DR. H. AUSTIN, DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

## DESKS

AND

**Office Furniture,**  
OF ALL KINDS.....FOR SALE BY

**JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all Kinds, attended to.

### SQUARZA'S PUNCH.

#### FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

#### ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

### FREDERICK MANSELL,

**MECHANICAL & ARCHITECTURAL**

**DRAUGHTSMAN,**

No. 422 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

El Paso District, Los Angeles County,

## MINING AGENCY.

C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

Letters or inquiries, containing Revenue or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to. The subscriber has a carefully prepared map, (and specimens,) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to J. Burnett, Esq., 425 Davis St., San Francisco Cal.  
El Paso, June 21, 1863. C. W. TAPPAN. au31

### R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,

**JOB TURNING & SCROLL SAWING.**

BRACKETS,

RED WOOD BALUSTERS,

NEWEL AND CEDAR BALUSTERS  
for Stairs.

Manufacturers of every description of Oval, Circular and Square

**PICTURE & LOOKING GLASS FRAMES**

For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS.

H. C. SOMES

### MINING LAWS AND FORMS

**JUST PUBLISHED BY H. H. BANCROFT** & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. E. Congdon. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. sep14

### H. C. KIBBE,

**MINING SECRETARY,**

**Commissioner for Nevada Territory,**

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

#### GENERAL NOTICES.

### New Patent Agency.

**WE HAVE CONNECTED WITH THE**

Publication of the "MINING AND SCIENTIFIC PRESS"

**The Patent Agency Business,**

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency**

The most desirable place to make Application for Letters Patent on the Pacific Coast. Apply at

Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

### FOREIGN PATENTS OBTAINED

By application at this office, Room 57 Government House. EWER & SMITH, Solicitors.

### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

### PATENT RIGHTS.

**Patent Rights Bought and Sold,**  
At the office of the "Mining and Scientific Press" Agency EWER & SMITH.

### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper. First of charge, they merely furnish the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventor. EWER & SMITH.

## WHEELER'S Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to flow the triturating loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans have been in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. col6-tf ZENAS WHEELER.

### Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,**

**CARPETS, DUCK, ETC.,**

Cor. Front and Sacramento streets,

SAN FRANCISCO.

### NATHANIEL GRAY,

**General Furnishing Undertaker,**

641 Sacramento st., Cor. of Webster

SAN FRANCISCO.

GEO. A. MITCHELL.

D. S. HUTCHINSON.

### METALF & HUTCHINSON'S

**PHOTOGRAPHIC GALLERY,**

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

### \$3. Per Dozen!

Large sized Photographs \$3.—Extra copies \$1 each. AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

#### HOTELS.

### International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

**FIRE-PROOF BRICK BUILDING.**

Most convenient to the

Steamer's Landing, Business sts. & Places of Amusement

**OPEN ALL NIGHT.**

**City Railroad Cars Pass the Door.**

**REDUCTION IN PRICES.**

Fine Bathing Rooms attached to the Barber Shop

Warm and Cold shower Baths Free to Guests.

**THOROUGHLY RENOVATED AND NEWLY** furnished this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

**BEST FURNISHED FAMILY ROOMS;** and sets as good a table as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

### Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

**THIS FINE, FIRE-PROOF BUILDING OFFERS MANY** advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,

WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL.

F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

## THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.

STEPHEN SMITH.....PROPRIETOR.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

**The Rooms are handsomely furnished,** supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House **Free of Charge.**

The House is open all night.

## P. M. S. C O.

**PACIFIC MAIL STEAMSHIP COMPANY'S** line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

**FOR PANAMA.**

The following Steamships will be dispatched in the month of November, 1863.

**Nov. 3d, - - - Steamer Golden Age.**

**Nov. 13th - - - Steamer St. Louis.**

**Nov. 23d - - - Steamer Orizaba.**

Will leave Folsom Street Wharf, with Passengers and Treasure, for PANAMA.

AT 9 O'CLOCK, A. M., PUNCTUALLY. And connect, via Panama Railroad, at Aspinwall, with tranships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidesdorff sts.



FOUNDRIES & MACHINE SHOPS.

REYNOLDS'

Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

127 of these Invaluable Machines,  
ARE NOW IN USE

In California and Nevada Territory, giving a perfectly  
regular motion and  
Saving 20 to 65 per cent of the Fuel.

Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act  
and least liable to get out of order of any Governor in  
use. It can be seen in operation at the Golden State Iron  
Works, and at the Stone Breaker, foot of Market Street,  
San Francisco.

Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney  
or Valve in the Blast Pipe by the pressure of the  
steam in the boiler. It will regulate the pressure to a  
pound, on the square inch. It cannot get out of order  
and any person can put one up in an hour after the damper  
is put in.

Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the  
common ratchet, and when small holes are wanted, it  
can be done four times as fast. The handle can be worked  
in any direction.

Felt for Steam Boilers, Pipes, Etc.,

At the lowest market rates.

Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest  
market rates.

Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury  
to the iron. In use for the past EIGHT years.  
Refer to—Sugar Refinery, San Francisco,  
Cottell & Co., San Jose,  
L. A. Booth, Esq., Virginia City,  
and 2,000 others in the United States.  
E. T. STEEN AGENT.  
No. 33 Fremont Street, San Francisco.

PORTLAND BOILER WORKS.

MOYNIHAN & AITKEN,

Boiler Makers & Sheet Iron Workers,

Mission, between Beal & Fremont Sts,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed  
at the shortest notice, and on the most reasonable  
terms. Jy 29

PUMPS!

HARRISON'S

California Lift and Force Pump,

WITHOUT VALVES OR PACKING,  
Suitable for Mines, Fire Engines, Wrecking or Irrigating.  
This is the Cheapest, Lightest and most Durable,  
and least liable to get out of order, of any Pump yet in-  
vented.

ALL SIZES;

Capable of throwing from ONE HUNDRED to FIVE  
THOUSAND Gallons per Minute—For sale by

C. H. HARRISON,

PHOENIX OIL WORKS,

Je 15

50 lbs. MARINE and

Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL  
Works in this city, for Hulls and Decks of Vessels  
from ground Mineral Rock contains Arsenic, Copper, Li-  
tharge and six other Minerals. When used on the Decks  
or Bottoms of Ships, it is equal to a coat of Stone, and  
quite equal to Copper, no worms will ever effect it, and  
cheaper than any other paint.

DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one  
part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur,  
three parts Mineral Paint, mix with Coal Tar and apply  
it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes  
of 50 lbs. each, or by the Pacific Metallurgical Works.

25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal  
to covering them with a coat of Stone, being perfectly  
Fire Proof, and costing less than any paint.

DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part  
white lead, thin with Linseed oil: if a lighter color is  
wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white  
Lead, mix with Linseed oil. Put it thick on a tin Roof  
as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. Fouquet, Superintendent.

WORKS, North Beach; Office, 509 Sac-  
ramento st., San Francisco.

FOUNDRIES & MACHINE SHOPS.

PALMER, HANSCOM & CO.,

GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

Genuine WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST  
complete amalgamation of the precious metals of  
any process now known.

By its steam is introduced in the most effective and eco-  
nomical manner, while it is peculiarly adapted to the  
catching of floating gold and silver, known to be other-  
wise lost. Made exclusively by

PALMER, HANSCOMB & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been  
granted the undersigned upon Steam Chest False Bot-  
toms for the inside of Amalgamating Pans or Tubs, and  
are cautioned against making, buying, using or selling  
the same without his consent. W. A. PALMER.

JOHN P. GALLAGHER.....JOSEPH H. WEED.

GALLAGHER & WEED,

BRASS & BELL FOUNDRY

AND

LOCK FACTORY.

No. 125 First Street, opposite Minna, next door to Pacific  
Foundry, all kinds of

Brass and Composition Castings and  
Finishing, done with neatness and  
dispatch.

CHURCH AND STEAMBOAT BELLS, OF ALL SIZES  
Made to order. Engineers' Goggles made and hung  
in the best manner. Bank, Vault, Store and Prison  
Locks, also brass Padlocks and Shop Locks of various  
patterns, on hand and made to order.

Particular attention given to casting Rudder Braces  
and Ship Work in general.

All Jobs promptly attended to.—Prices  
moderate.  
Removed from Oregon street, between Front and Davis.

Miners' Foundry

—AND—

MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHIN-  
ery, the Best and Most Economical, manufactured  
in the state of California, will be furnished with dis-  
patch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz  
mill machinery, Mining Pumps, Amalgamators, Retorts,  
Etc., Etc.

Particular attention will be given to the manufacture  
of Machinery in Sections, designed for places of difficult  
access. Various models of Quartz Crushers, Amalgama-  
tors and Water Wheels—some in operation and on exhibi-  
tion.

\* Parties desiring to test their ores practically, in  
small quantities will be afforded ample facilities, free of  
cost.

All parties desiring accurate and highly finished draw-  
ings and Superior Machinery, at most reasonable rates  
are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING

San Francisco, February 23, 1863.

San Francisco Machine

....AND....

IRON WORKS!

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON  
most reasonable terms.

Steam Engines, High and Low Pressure; Quartz  
mills, Saw mills, Mining Pumps, Hoisting machines for  
mining purposes, Wine Presses, Agricultural implements  
etc, etc, and Castings of all descriptions made to order

Steam Engines exchanged and for sale by

DEVORE, DINSMORE & CO.

REPAIRING promptly attended to.

FOR SALE.

San Francisco, July, 1862. Jy 13

FOUNDRIES & MACHINE SHOPS.

VULCAN IRON WORKS COMPANY

P. Torquet, Manager,

STEAM ENGINE BUILDERS

and

BOILER MAKERS,

Iron Founders and General Engineers,

No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and quartz-crushing  
Machinery.

Shoes and Dies of the hardest iron,

Russka iron Punched Screens.

Steamboat Machinery; Saw, Flour and Sugar Mills.

High and Low Pressure Boilers of all Styles.

JOXVAL and other Turbine Water Wheels with latest  
improvements.

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE  
and Lift Pumps, Church and Steamboat Bells, Tay-  
cru and Hand Bells and Gongs, Hose and all other joints,  
Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles,  
HYDRAULIC PIPES and NOZZLES for MINING PUR-  
POSES, Iron steam pipe furnished with fittings, &c.;  
CUTTING JOINTS OF ALL SIZES. Manufacturers of "Gar-  
ratt's Patent Improved Journal Metal."

D. MORRIS,  
MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of  
Repairing done at moderate prices. Jc 13

LEWIS COFFEY AND RISDON,  
STEAM BOILER AND SHEET IRON  
WORKS.

The only exclusively Boiler Making Establishment on  
the Pacific Coast Owned and conducted by Practical  
Boiler Makers. All orders for New Work, the repairing of  
Old Work, executed as ordered, and warranted as  
to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

THEODOR KALLENBERG

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophi-  
cal Instruments, Scales, Weights, etc.; Steel  
Stamps, Dies and Die Sinking, Embossing Stamps.  
Repairing of Machinery promptly attended to.

No. 418 Market street, San Francisco.  
n7.3m

HEPBURN & PETERSON'S  
AMALGAMATOR.

The subscribers would call the attention of the Min-  
ing Public to their Reducer and Amalgamator, and also  
to their Separator for reducing and separating the mine-  
ral from

GOLD AND SILVER ORES,

manufactured and exhibited at the Vulcan Iron Works,  
Nos 137 and 139 First Street, San Francisco.

These machines secure to the miner a more Expeditions  
and Perfect Reduction and Amalgamation, a less liability  
to accident and delay, and a greater amount of useful  
effect in proportion to the power employed to keep them  
in operation than any other machines now in use for pro-  
ducing similar results. This fact is attested to by their  
general adoption and preference at all the principal  
Reduction Works in Nevada Territory; among which may  
be mentioned the Gould & Curry Mill, the Silver state  
Reduction Works, Yephyr Flat Mill, Pioneer Mill, Eastern  
Slope Mill, Phoenix Mill, etc.  
nov 8 3m HEPBURN & PETERSON.

KUSTEL & DEETKEN'S  
METALLURGICAL WORKS,

FOR THE REDUCTION OF

SILVER AND GOLD ORES,

Tallings, Sulphurets, Arsenurots, Etc., Etc.,

Cupellation and Refining of Silver and Gold,

Practical Assays for Silver and Gold,  
in Small and Large Quantities, by Smelting, Chlorination  
and Pan Manipulation.

WORKS—On the San Bruno Road.

OFFICE—No. 605 Montgomery st, San Francisco.

nov 7 1f.

PATENT CLAIMS.—We will furnish, on application, the  
claim of any invention that has been patented within the  
last fourteen years. The name of the patentee—date  
of patent, when known, and two dollars for copying  
should be sent.

MODELS.—Inventors will please attach to all models  
sent to us, their names and address, in a legible, per-  
manent form, this will avoid confusion and prevent  
errors.

DRAWINGS.—We have highly talented and efficient  
Draughtsmen, by whom drawings of every descriptions  
are executed in the best style of art, with promptitude,  
and at a moderate cost.

WANTED

By a competent person, the Secretaryship of four  
Mining Companies. Books to be kept at the Office of the  
Mining and Scientific Press, No 57 Government House  
inquire as above. oct 6

SOUTH PARK

Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASON-  
able rates, and Working Assays made of small  
lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO.,  
Office in Shiel's Block, opposite Masonic Temple  
Je 13 W. R. WATERS Secretary.

W. W. HANSCOM,

Steam and Mechanical Engineer,

Designs furnished, and Drawings made for  
Engines, Mills, Water Wheels, Mining Ma-  
chinery, etc., etc. Agent for MacKenzie's  
Patent Capulo and Blower.

At Golden State Iron Works,  
aug x First Street, San Francisco.

Eye, Ear and Throat.

DR. DE CASTRO,

Oculist and Aurist,

WHO HAS PRACTISED IN NEW  
York and all the principal cities of Europe with  
such unrivalled success, and from each place is in pos-  
session of the most eminent testimonials, may now be con-  
sulted upon diseases of those delicate organs, with a view  
to their permanent cure. Deafness of long standing thor-  
oughly cured. The Doctor employs his (by the Medical  
Society of London approved)

Self-adjusting Artificial Tympanum,

For the relief of deafness, attended by loss or injury of  
the membrana tympani, and for the cure of discharge  
from the ear—the invention of Dr. Castro, M. D., author  
of "Deafness Practically Illustrated as to its Nature and  
Treatment," etc.

The self-adjusting Artificial Tympanum was first intro-  
duced to the notice of the profession at the meeting of the  
Medical Society of London, on the 20th of November,  
1863. An animated discussion ensued on the reading of the  
paper, and several members of the Society bore testi-  
mony to the success of the remedy and the importance of  
the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-  
Adjusting Artificial Tympanum, as he had observed the  
immense benefit a young lady friend of his had received  
from it. She was in fact, quite deaf, and in a most mis-  
erable state—the effect of the tympanum was instantaneous—  
—quite like a miracle. Five more testimonials from  
Members of the Medical College, New York, and the prin-  
cipal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and  
Kearny streets. Entrance on Market street.

Mr. Editor—Having been afflicted  
with deafness for the last two years, originating from a  
severe cold, and for the last month suffering from the  
most excruciating pains in my ear, I was obliged to come  
down to San Francisco to seek relief. After a physician's  
recommendation to wait on Dr. De Castro, on the corner of  
Kearny and Market streets, and underwent one operation,  
and it is with the utmost pleasure I can say my hearing  
was suddenly and without pain entirely restored. I deem  
it my duty to make this known to the public, and to recom-  
mend Dr. De Castro's plan as an aurist.

JOHN REESE, Napa Valley  
James Callaghan, witness.  
San Francisco, July 30th, 1863.

[From the Daily Alta.]

San Francisco, June 30th, 1863

ED'S DAILY ALTA:  
Permit me through your widely circulated journal, to  
say, that my daughter Mary Ellen, has been afflicted with  
deafness since she was thirteen months old, and that she  
has been a member of the Deaf and Dumb Institute since  
it was organized. On taking her to Dr. De Castro, on the  
corner of Kearney and Market Streets, and undergoing on  
der his direction, two operations, she has heard sound  
very distinctly; and is now, I am happy to state, in a  
fair way to get permanent relief. The result, thus far, is sat-  
isfactory; and I deem this notice due to Dr. De Castro for  
his skill; and would recommend all parties similarly af-  
flicted to give him a trial. My daughter has at different  
times been under the care of the most skillful physician,  
not only in California, but up to the period of visitin  
Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT,  
812 Green Street.



## MINING NOTICES.

**Mammoth Consolidated Gold & Silver Mining Co.,** Excelsior District, N. T.—Office 628 Montgomery St., San Francisco, Nov. 18, 1863, Notice is hereby given, that there will be sold at Public Auction, at the office of the Company, in San Francisco, on Saturday January 9th, 1864 at 12 o'clock, M. of that day, to the highest bidder, for cash in U. S. gold coin, so many Shares of the Capital Stock of said Company standing in the names of the following shareholders as will be necessary to pay assessment No. 1, of ten (10) cents per share, due, levied thereon by the Board of Trustees on the 9th of May, 1863; also assessment No. 2, of twenty (20) cents per share, duly levied thereon by the Board of Trustees on the 27th of June, 1863, together with all the expenses of advertising and sale, unless said assessments are previously paid to M. G. Elmore, Sec., San Francisco, or to W. H. Dalrymple, Financial Sec., Aurora.

Name	No. Cert.	No. Ass't.	Shares	Am't.
M. Brown	6 & 7	2	25	\$7 50
J. B. Best	74 343	1	200	115 00
G. W. Bailey	344	1	200	80 00
G. C. Chism	33 to 37 incl	2	100	0 00
J. J. Coddington	358	1	25	22 50
D. C. Crocker	334	1	250	100 00
T. A. Catter	25 393 to 403 incl	1	125	37 50
J. R. Ducker	121 122	1	50	20 00
U. B. Treanor	50 to 67 incl	1	200	80 00
WD Garland	437 442 450 451	2	275	\$2 50
D. H. Haskell	65 to 69 incl	1	50	20 00
W. A. Holt	70 71 72	2	25	7 50
J. H. Jones	333	1	250	100 00
R. P. Johnson	443	2	100	50 00
A. B. Kelly	275 to 291 incl	2	100	30 00
J. H. Latham	283 384 385 to 291 incl	2	60	16 50
E. J. Mathews	342	2	200	60 00
W. Mason	92 942	2	13	3 90
John Patten	416 417	2	16	4 50
Geo Raymond	136 to 142 incl	2	125	37 50
G. H. Rogers	143 to 151 incl	2	200	60 00
J. S. Shultz	161 487	1	95	38 00
G. D. Myers	360	1	5	2 00
A. J. Severe	170 to 189 incl	2	200	60 00
N. Steiner	118 to 124 incl	1	100	40 00
J. W. Smith	191 192	1	75	10 00
J. W. Tucker	237 to 240 incl	1	400	160 00
H. Van Dine	218 333	1	175	68 75
H. Watson	263 to 267 incl	2	25	7 50
W. J. Vernon	239 230 231 241 242	2	40	10 80

By order of Board of Trustees.  
M. G. ELMORE, Secretary.

**Silver Butte Consolidated Silver Mining Company.**—Notice is hereby given that on SATURDAY, December 12th, 1863, at 10 o'clock A. M. there will be sold at public auction, at the office of the Company, so many shares in the capital stock of the Silver Butte Consolidated Mining Company standing in the names of the following persons as may be necessary to pay all assessments now due by said parties, together with all expenses of advertising and sale, unless said assessments and charges are previously paid.

Name	No. Certificate	No. Shares	Am't.
Beckford, D. R.	273	1	\$ 50
Brauchamp, J. H.	239, 100	20	10 00
Dore, B.	279, 276	20	10 00
French, B. F.	78	62	26 00
Johnson, B. R.	76, 78, 79	5	2 50
Johnson, G. H.	64, 56, 57, 144, 145, 146, 253, 260, 261, 192, 193, 194, 195, 196, 197, 198, 199, 200,	54	27 00
Keck, H.	195, 196, 197, 198, 199, 200,	125	62 50
Maynard, F. T.	266	4	2 00
Morgan, E. D.	121, 122, 266	62	26 00
Mills, A.	293, 294, 295	31	15 50
Mauchester, A.	105	6	3 00
Percival, R.	67, 92, 94, 97	5	2 50
Spalding, G. S.	316, 317, 318	3	1 50
Sproul, J. R.	211	5	2 50
Warfield, J. J.	317	80	15 00

A portion of the above stock has been sold and not transferred. By order of the Board of Trustees.  
M. G. ELMORE, Secretary.  
San Francisco, November 10th, 1863 no16

**Anderson Copper Mining Company.** Notice is hereby given that on TUESDAY, the First day of December, A. D. 1863, at two o'clock P. M., at the sales-rooms of Jerome Rice & Co. No. 327 Montgomery Street, there will be sold at Public Auction, by order of the Board of Trustees of the Anderson Copper Mining Company, so many Shares of the Capital Stock of the said Company, standing on the books in the names of the persons specified below, respectively, as shall be sufficient to pay all assessments levied thereon by the Board of Trustees, which were due and unpaid on the First day of September, A. D. 1863, together with expenses thereon of advertising and sale:

Name	No. of Shares	Am't. due.
J. C. McClung	175	36 25
E. R. W. Bow	200	30 00
Thomas Kyle	200	20 00
E. A. Morse	200	40 00
Edward Bannon	200	30 00
Wm. McDonald	200	40 00
M. Mc Young	15	7 50
E. R. Mitchell	25	3 75
W. Wilnot	20	2 00
J. W. Sheppard	10	1 50
J. C. Clark	75	7 50
J. C. Ring	40	2 00

By order of Board of Trustees.  
I. C. PRAY, Sec'y.

## A New and Valuable Book.

**Process of Silver and Gold Extraction.** by Guido Kustel, Mining Engineer and Metallurgist, former manager of the Ophir Works, &c; 550 pages octavo illustrated.

This admirable work has met with the highest commendations from the Press and Scientific men, as a clear and able exposition of the science as practised in California and Nevada Territory—it is a treatise for the people in good plain English and finely illustrated.

Price—post paid—Cloth \$6; Sheep \$7

A. ROMAN & CO.,  
Booksellers, Importers and Publishers,  
417 and 419 Montgomery street,  
San Francisco.

## MINING NOTICES.

**May Flower Gold and Silver Mining Company.** At a meeting of the Board of Trustees of the above Company, held October 6th, 1863, an assessment of twenty-five cents per share was levied upon the capital stock of said Company, payable in United States gold coin to the Secretary at the office of the Company, No. 9 Express Building, Montgomery street.

S. N. BOWORTH, Secretary.  
San Francisco, October 31st, 1863.

**Pioneer Cose Gold and Silver Mining Company,** Cose District, Tulare County, Cal.—Notice is hereby given that in accordance with the laws of the State of California and an order duly made by the Board of Trustees of the Pioneer Cose Gold and Silver Mining Company, there will be sold at public auction, at the sale-room of Jerome Rice & Co., No. 327 Montgomery street San Francisco, on WEDNESDAY, the second day of December, 1863, at 11 o'clock A. M., so many shares in the capital stock of the above named company, standing in the names of the following persons, as will be necessary to pay all assessments now due on said stock, together with all expenses of advertisement and sale, unless sooner paid:

J. W. Basford, 100 shares, \$25; T. J. Brother, 165 shares, \$41 75; Jas. Brownlee, 25 shares, \$6 25; J. N. Brown, 18 shares, \$2 50; G. H. Bodish, 100 shares, \$25; B. M. Barstow, 25 shares, \$6 25; W. W. Ball, 25 shares, \$6 25; J. Chapman, 25 shares, \$6 25; A. B. Caldwell, 29 shares, \$7 25; J. M. Douglas, 20 shares, \$5; J. H. Earle, 63 shares, \$15 75; J. L. Garney, 75 shares, (assessments Nos. 1 and 2), \$56 25; J. N. Galtwait, 25 shares, \$6 25; T. V. Hamilton, 20 shares, \$5; D. F. Hughes, 75 shares, \$18 75; Geo. H. Hare, 143 shares, \$35 75; H. Kent, 16 shares, \$4 16; H. C. Lyon, 25 shares, \$6 25; M. H. Lissack, 25 shares, \$6 25; M. Laird, 20 shares, \$5; L. Lyon, 20 shares, \$5; S. Levy, certificates Nos. 34 and 37, 10 shares, \$1 50; Levy & Bro., 10 shares, \$2 50; J. R. Lowe, 50 shares, \$12 50; W. L. Luckett, 25 shares, assessment Nos. 1 and 2, \$18 75; S. B. McKee, 10 shares, \$2 50; Lee McGowan, 20 shares, \$5; J. S. Robinson, 62 shares, \$15 50; Wm. Reiding, 50 shares, \$12 50; H. Roche, 10 shares, \$2 50; C. T. Ryland, 25 shares, \$6 25; F. Stock, 25 shares, \$6 25; J. C. Smith, 69 shares, \$17 25; H. C. Van Dalsen, certificate No. 86, 6 shares, \$1 50; T. W. Wolekink, 24 shares, \$6; C. B. Younger, certificates Nos. 90, 224 and 226, 28 shares, \$7.

J. S. LUTY, Secretary,  
305 Montgomery street, S. F.  
San Francisco, October 30, 1863. nov2 Im

**Emmet Copper Mining Company.**—Notice is hereby given that at a meeting of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No. 528 Montgomery street, San Francisco, October 1, 1863, an assessment of twenty cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to T. LYONS, Superintendent, Copperopolis.

By order of the Board of Trustees.  
M. G. ELMORE, Secretary.  
oct12

**Ruth Windsor Tunnel Company, Esmeralda district.**—Notice is hereby given that an assessment of fifty cents per share was levied on the capital stock of the above company on the 21st day of September, 1863, payable immediately to the Secretary at his office in United States gold coin.

By order of the Trustees.  
T. L. Bibbings, Secretary, 305 Montgomery St.  
San Francisco, October 13, 1863.

## Mining Shares For Sale

BY

C. A. CRANE,

Office 28 Government Block.

475 Shares U. S. Mining Company, Virginia City.  
910 Shares Granada Gold and Silver Mining Company Virginia Hill, Virginia City.  
168 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.  
20 Shares Mohave Mining Company, La Paz District, Colorado, N. M.  
30 Shares Aspinwall Gold and Silver Mining Company, Devil's Gate District, N. T.  
75 Shares Washington Copper Mining Company, Indian Bar, Tuolumne Co.  
228 Shares Montezuma Gold and Silver Mining Company, Inyo District, Tulare Co.  
90 Shares Owen's County Consolidated Gold and Silver Mining Company, Inyo District, Tulare Co.  
50 Shares Crown Point Ravine Gold and Silver Mining Company, Virginia District, N. T.  
10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California. sep28

**Heyer Bros.,** 76 and 78 Federal Street, BOSTON.  
**Heyer Bros.,** 406 Battery Street, SAN FRANCISCO.

## HEYER &amp; CO.,

IMPORTERS OF  
AMERICAN AND EUROPEAN

Fancy Goods, Toys &amp; Musical Instruments; also,

SOAPS, PERFUMERY, HAIR AND TOOTH BRUSHES, Port Folios, Portmanteaus, Ladies' Bags, Photograph Albums, Cutlery, Willow and Parian Ware, Children's Carriages, etc., Our Stock of Violin, Guitar and other Strings is very large. Our Foreign Goods are selected by one of the firm, and the American by the Boston House (established 1824.) We have the Sole Agency for

**Hallet & Davis' Boston Pianos,**  
**Smith & Bros' Harmoniums, and**  
**Treat & Linsley's Melodeons.**

The Hallet & Davis Pianos are each supplied with their Patent Suspension Bridge, which is a decided improvement. It gives a full and clear vibration in the upper octaves, producing a quality of tone unequalled in firmness and purity. Our Melodeons and Harmoniums are of the best quality, and warranted to give satisfaction. San

## MINING CARDS.

## OWEN'S RIVER CANAL COMPANY.

Capital Stock ..... \$1,000,000.

10,000 Shares ..... \$100 per Share.

A Portion of this Stock is no offered to the public, and recommended as an investment.

FULL PAID AND UNASSESSABLE

Stock, also Assessable Stock, can be obtained of A. J. DOWNER &amp; CO., the authorized Agents of the Company, 406 Montgomery street.

President.....R. S. WHIGHAM.  
Secretary.....W. FISK HITCHCOCK.  
Treasurer.....MONTGOMERY GOLLY.  
Superintendent.....WILLIAM FLEMING.  
Engineer.....J. E. CLAYTON.

TRUSTEES:  
R. S. WHIGHAM, formerly of Whigham's Mill, Nevada City.  
WILLIAM FLEMING.....of San Francisco.  
SHEPHERD.....Paying Teller of Parrott & Co's.  
ISAAC SWAIN.....of A. J. Downer & Co.  
WILLIAM P. PRATT.....of Nash & Fogg.  
Office of Company 328 Montgomery street  
28sep

JOHN ARMSTRONG. WM. P. WILDER.

## ARMSTRONG &amp; WILDER,

VIRGINIA CITY, N. T.,

SEARCHERS OF RECORDS

for Mining Claims &amp; Real Estate.

RELIABLE ABSTRACTS

guaranteed at reasonable prices.

LETTERS OF ENQUIRY

promptly answered.

ALEXANDER STOTT,

MINING SECRETARY,

512 Sansome Street, San Francisco.

Secretary of—

HOMER SNOR, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and Silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

## T. C. Sanborn &amp; Co.

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

OPHIR SILVER MINING STOCK,

GOULD &amp; CURRY MINING STOCK,

CHOLLAR MINING STOCK,

CALIFORNIA STEAM NAVIGATION CO'S STOCK,

BOUGHT &amp; SOLD.

## NEW MINING AGENCY.

WE HAVE MADE ARRANGEMENTS WITH A SPECIAL Correspondent at Austin, Reese River, by which any information attainable with regard to any particular mine in that locality can be obtained, for the

Private Benefit of Parties

in this City or elsewhere. Our correspondent will visit any mine which may be designated and report upon the general characteristics and condition of the same, the amount of work which may have been done, etc. A reasonable fee will be required for such service. For further information apply at this Office.

EWER &amp; SMITH.

## L. F. LELAND,

STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board

Je-29

## AGENCY

For the Purchase and Sale of

MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SILVER Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.

je13 Wm. FAULKNER.

## New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

MORGAN, STONE & Co  
108 Front Street, San Francisco.

## BUSINESS CARDS.

## A. C. MORSE,

Mining and Real Estate Agent,

OFFICE—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS** with MINER S. MARTIN, Esq., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

## GOLDEN AGE G. &amp; S. MINING CO.,

Austin, Reese River.

OFFICE, 57 Government House.

WM. POOLER, SEC'Y.

## Fire Hose! Fire Hose!! Fire Hose!!!

J. P. D. WILKINS,

The celebrated HARNESSE MAKER of Stockton, makes FIRE HOSE, from the best material, and WARRANTED at a trial of the Weber Steam Engine Co., No. 3, of the city of Stockton. This Hose is manufactured at his establishment, and known to stand a pressure of 125 pounds to the square inch; as certified by the Chief Engineer.

ALSO FOR SALE,

All kinds of HARNESSE AND SADDLERY, at the lowest cash prices. REPAIRING done promptly, one door west of the Main Street Stable. oct12

## WANTED,

GOLD QUARTZ SUITABLE FOR

CUTTING JEWELRY,

By FRONTIER A. DEVEREUX,

au31 437 Pine street, San Francisco.

## THE EUROPEAN

ORE REFINING

COMPANY.

Quartz Mill and Furnaces, Bryant Street,

Crossing Third, San Francisco.

RECEIVE ALL KINDS OF

ORES AND MINERALS.

In large or small quantities, for such Experienced Treatment by the

LATES EUROPEAN METHODS,

As may be ascertained by

CAREFUL ANALYSIS,

At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.

The South Park, and Folsom and Kearny street Cars pass Bryant street, au31

## The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF

COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,

LEAD, and SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined with Silver and Copper Ores, and advances made therefor.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,

je1-1f Montgomery Street, S. F. San Francisco.

## MARTIN &amp; Co.,

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

Purchase of Copper Ores,

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.

Sacks will be furnished and Freight Paid on all consignments desired by the consignors.

HENRY MARTIN, J. F. GREENMAN,

New York. San Francisco.

San Francisco Post Office, Box 1259.

je 1.

## NORTH BEACH QUARTZ MILL

and

REDUCTION WORKS

Are prepared to work Gold and Silver ores, in large or small quantities.

Working assays made of small lots, and all kinds of ores crushed at short notice.

Our new and complete Machinery, will enable us to give results fully up to the merits of rock.

WHEELER &amp; THAYER, Proprietors,

C. C. JONES, Amalgamator

San Francisco, Oct. 13, 1863.





W. B. EWER,  
EDITOR.

A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

EWER & SMITH,  
PROPRIETORS.

VOL. VII. SAN FRANCISCO, MONDAY EVENING, DECEMBER 7, 1863. NO. 6.

#### NOTICE.

The publication of the MINING AND SCIENTIFIC PRESS will hereafter be conducted by the firm of DEWEY & CO.

C. W. M. SMITH,  
W. B. EWER,  
A. T. DEWEY.

San Francisco, Dec. 1st., 1863.

#### TERMS OF SUBSCRIPTIONS.

Upon enlarging our sheet, we have determined to adhere steadily to the advance payment for subscriptions, and shall make only a slight advance on old prices. Our rates, hereafter, will be as follows:—For one year, \$5; six months \$3. By city carrier, 50 cents per month.

#### OUR NEW ARRANGEMENTS.

By special notice it will be observed we have associated with us in the publication of the PRESS, Mr. A. T. Dewey, of La Porte, Sierra county, who has been connected with the *Mountain Messenger*, as publisher, for the past five years. We shall now be enabled to carry out our long cherished plan of enlarging the paper, and the friends of mining and mechanical industry may rest assured of soon receiving a journal in every way worthy of their representation and universal support.

#### MINES AT SALT LAKE.

The *Union Vedette*, the "Soldiers paper," published at Camp Drum, Salt Lake, contains the following account of recent mineral discoveries in Utah:—

Evidences of the vast wealth concealed in the mountain ranges of this Territory accumulate daily. In the Wasatch on the east, and in the Oquirrh or West Mountain range, silver, copper and lead have been discovered. In Bingham Cañon, in the latter range, ledges of silver and copper are now being worked, and before Spring, both saints and soldiers will be amazed at the rich developments. On the west, at Deep Creek, at Antelope Springs, at Egan Cañon and Ruby Valley, ledges of silver equal to Reese River and Washoe have been discovered, prospected, and some are being worked. On the north, at Butte Creek, placer gold mines are paying the Morrisites richly, and at Hickman's Butte a whole mountain of cinnabar has been discovered and will be worked in the Spring. Still further north, on the Snake River and the Blackfoot, gold diggings equal to the Boise and Bannock have been worked all Summer. In fact the whole Territory is one vast deposit of rich minerals, only awaiting industry and intelligence to develop it.

**TAXING THE MINES.**—C. L. Strong, Esq., Superintendent of the Gould & Curry claim, was before the County Board of Equalization to-day for the purpose of having the taxes of that claim equalized. The Board had assessed the improvements on the claim at eight hundred thousand dollars, but Mr. Strong informed them that they might tax it three hundred thousand more, and the company would be satisfied, which they did—so this one claim is assessed at upward of a million of dollars; and yet there are men in this Territory who insist that the mines do not bear any portion of the burdens of taxation. One such fact is worth a million of shallow, sophistical arguments, whether they emanate from judge, lawyer or loafer.—*Virginia City Bulletin*, Nov. 30.

The ship *Lizzie Moses*, for New York, takes 200 tons of Napoleon Copper ore.

**SAN FRANCISCO TWENTY-ONE YEARS AGO.**—A. G. Toomes, of Elder Creek, says the *Cull*, who lived in this city during most of the Summer of 1842, furnishes the *Red Bluff Beacon* with the names of the population of Yerba Buena (now San Francisco) at the time. They are:

William Ray and wife, of the Hudson Bay Co., and three employees; N. Spear and wife; Captain Hickley; Mr. Davis, a blacksmith; Robert Davis; Daniel Still; Mr. Viogel; Peter Suerreback; J. Fuller, wife and three children; Messrs. Teal & Titcomb; Mr. Limantour; Mrs. Inna Briones and daughter; Mr. Rock; Juan Padillo; R. H. Thomas, and A. G. Toomes. The number of buildings was thirteen.

What a change! In twenty-one years the little hamlet of twenty-seven souls and thirteen buildings, has grown to a city of one hundred thousand people and thirteen thousand buildings. Of the inhabitants that were here in 1842, we only know of six now in existence, viz: Robert Davis, at Honolulu; Limantour, in Mexico; Mrs. Fuller and two of her children, in this city, and Mr. Toomes, of Elder Creek.

**WHO ARE THE HAPPY?**—Lord Byron said: "The mechanic and working men who can maintain their families, are, in my opinion, the happiest body of men. Poverty is wretchedness, but even poverty is, perhaps, to be preferred to the heartless, unmeaning dissipation of the higher orders." Another authority says: "I have no propensity to envy any, and, least of all the rich and great; but if I were disposed to this weakness, the subject of my envy would be a healthy young man, in full possession of his strength and faculties, going forth in a morning to work for his wife and children or bringing them home his wages at night."

**CALIFORNIA ROZEN FOR THE EAST.**—This new article of California export, says the *Evening Journal*, appears to be assuming quite a prominent stand among the products of the State. The hundred barrels for New York by the William Cummings is the second shipment, and the difference between the cost here and the price in the East promise the shippers a handsome profit. California rosin costs at home \$15 per barrel; the price it brings in New York is \$45 per barrel. The resources of this State for naval stores add an additional importance to her relationship with the Government during the existence of the war.

**AN INCIDENTAL GOOD.**—A Boston paper says that if Exchange will only hold good at the present high figures for a few months, we shall manufacture many articles which we now import. A gentleman in New York has recently imported twelve French families from Lyons, who are killed in the manufacture of velvets, with the intention of starting a manufactory of first-class velvet in this country. The Waltham Watch Manufactory has made us independent of Geneva and the Portsmouth Mills will soon enable us to do without Coates & Taylor.

**IRISH MOSS** has been found growing abundantly on the rocks along the beach in Scituate, Mass., and about three thousand barrels are gathered annually. It is worth at first hands from five to six dollars per barrel.

**BELOW THE ATLANTIC.**—Soundings in the Atlantic have been particularly pushed forward, and have excited, on account of the telegraph cable, more general interest than any other yet taken. They have revealed the fact that two hundred and thirty miles from the coast of Ireland the water is still shallow; or in other words, that there is another Ireland only waiting to be raised—thus reversing the famous panacea for keeping the country quiet. It is just beyond this that the true Atlantic begins; the gulf suddenly sinks to nine thousand feet. Thus Ireland may one day have a coast line as high as the Alps. The whole floor of the Atlantic is paved with a soft, sticky substance, called ooze, nine-tenths consisting of very minute animals, many of them mere lumps of jelly, and thousands of which could float with ease in a drop of water; some resembling toothed wheels; others, bundles of spines or threads shooting from a little globule. Some, however, are endowed with property of separating flint from the sea water—which is more than every chemist could do; and there are hundreds of square miles covered with the skeletons of these little creatures. Part of the ooze is doubtless from the clouds of rain-dust which rise from the vast steppes of South America in such masses as to darken the sun, and make the animals fly to shelter, and which, after sweeping like a simoon over the country, lose themselves in the 'steep Atlantic.' No bone have been found of the large animals, so that the kraken and sea serpent might sleep their last sleep, and leave not a bone or a vertebra to tell the tale. Not a mast or anchor, not a block or stran, not a coin or a keepsake, has been found to testify of the countless gallant men, who have gone down amid the pitiless waves.—*All the Year Round*.

**THE FIRST SAWMILL.**—The old practice of making boards was to split up the logs with wedges; and, inconvenient as the practice was, it was no easy matter to persuade the world that the thing could be done in a better way. Sawmills were used in Europe in the fifteenth century; but as lately as 1855 an English ambassador, having seen a sawmill in France, thought it a novelty which deserved a particular description. It is amusing to see how the aversion to labor saving machinery has always agitated England. The first sawmill was established by a Dutchman, in the year 1663, but the public outcry against the newfangled machine was so violent that the proprietor was forced to decamp with more expedition than ever did Dutchman before. The evil was thus kept out of England for several years, or rather generations; but in 1693 an unlucky timber merchant hoping that after so long a time the public would be less watchful of its interests, made a rash attempt to construct another mill. The guardians of the public welfare, however, were on the alert and pulled the mill to pieces.

The effects of narcotic poisons seems to be destroyed by pouring cold water on the face and head. A girl, accidentally poisoned in England with laudanum, had had all the usual remedies administered without effect; when cold water was applied, however, she breathed more easily and bled from the nose. The treatment with water being suspended, she relapsed into coma; being resumed she again rallied and in 60 hours was completely recovered.



[From our Traveling Correspondent.]  
COPPEROPOLIS.

MR. EDITOR:—I am happy to state that our exertions to bring this rich country into proper notice, and raise it to its legitimate rank, are meeting with success, as well as giving satisfaction. I am daily in receipt of letters from the Bay and country congratulating me upon the manner in which I have carried out your instructions. While this is the case, I shall be content to fulfil my mission to the end, though involving considerable labor, expenses, and inconvenience. I am also happy to state that Mr. Handy of San Francisco is now following me, taking a survey of the mines, with a view to publish a map of the copper district, which will be of immense value to the public. Mr. H. is the surveyor of the Stockton Railroad to Copperopolis via Knight's ferry, the importance and necessity of which I shall have to speak more fully hereafter. He has politely requested to make use of my letters, which I readily granted, feeling assured of your compliance.

In my last letter I stated the mines north of Copperopolis were so numerous and far apart that I was obliged, at that time, to confine myself to those around Campo Seco. We must start once more, therefore, from Copperopolis, north of Salt Spring Valley, commencing with the

#### KEYSTONE.

Whether this name was given to the mine by accident or design I cannot tell. It is, nevertheless, peculiarly appropriate, for without doubt, it is the keystone of the most magnificent and incomparable copper discovery in the world, fabulous alike in richness, extent, and permanency. When, in Cornwall, the Stephenson Consolidated lode stood developed for seven miles. It ranked for years the copper wonder of the world, pining its grandeur only to the dawning genius of Australia with her Burra Burra and Capunda, and now how absolutely insignificant are both of these systems? Here today, in a country unequalled for climate, scenery, facility of transit, and every other attribute of human happiness and success, stands the old Keystone, the centre of a copper system, reliably developed north and south from Mariposa to Nevada, one hundred and ninety-five miles, and embracing its parallels for twenty-five miles wide. One hundred years hence, and what mind can foreshadow its effects upon the elevation of the State and nation? And when this glorious valley, with its grand, broad, level sweep, from the Stanislaus to the Mokelumne, thence to Ione and the Cosumnes, is a mighty net-work of great cities, and private villas, what a histrionic spot the Keystone will be! May we not suppose that the people of that day will trace upon some old bronze monument, made from its own ore, which will no doubt then raise its head to heaven, the names of Read, McCarthy, Ryan, Mendeville, Aitkin, Powning, and in memory of the original discoverers of this, even now famous lead?

Some may think, perhaps, this is an exaggerated introduction. Before I get through I shall show it is not. I am a great believer in copper, and I am still a greater believer in this particular system. Let us see if I am right, and the Keystone worthy the reputation I have given it. The claim contains 3,300 feet, divided into 3,300 shares. There are three shafts respectively 320, 50 and 150 feet deep. Through the mysteries of these I was politely piloted by Mr. Richard Powning, or Capt. Dick, as he is familiarly called. I shall begin with the upper or north shaft, 320 feet. In this there are seven drifts running in opposite lines, with every other requisite for convenience and expedition in work. The lead in the bottom drifts, running in 40 feet, is nine feet wide; containing three feet No. 1 ore, six feet No. 2; the latter averaging over 12 per cent. The next level above, at the depth of 200 feet, drifts and ores about the same. The next level, with longer drifts, shows the vein ten feet wide; six inches No. 1, the balance, No. 2 ore, having already been taken out. In these upper levels there are thousands of tons of No. 2 ore, hitherto neglected, but which being concentrated, in the new works now on the eve of completion, will alone be a fortune to the company. This shaft is 500 feet below the northern line, where it joins the Consolidated. Some 2,000 feet down towards town stands the old discovery shaft, 50 feet deep, with a drift 40 feet long. Here the vein is nine feet wide, 2 feet of No. 1, and 7 ft. of No. 2 ore. Then 500 feet lower down again, 17 feet off the Union line, is the third main shaft, 160 feet deep, with two drifts, eleven feet each. Here the vein, at the bottom, is 12 feet wide;

four feet No. 1, eight feet No. 2 ore. On the next level, 50 feet above, the side drift 150 feet long shows the vein two feet wide, equally divided into No. 1 and No. 2 ores. The opposite drift runs into the side claim east, called the Inimitable, leaving an 18 feet horse between the two leads, and shows that vein 13 feet wide all No. 2 ore, but averaging 15 per cent. This runs 20 feet on the vein. On the next level, 50 feet higher, a drift runs 15 feet on the vein, showing pretty much the same results. In this shaft there are also thousands of tons of No. 2 ore ready for stopeing the moment the concentration works get under weigh. There are also some other "prospecting shafts" down in different parts of the claim, disclosing equally favorable results, but which would be tedious and unnecessary to particularize.

The concentration works, on the eve of completion, (being expected to start next Saturday) form a very distinguishing feature of the Keystone. They are, I believe, the first of the kind in America, certainly in California, and throughout are of the most substantial and first-class character, reflecting the highest credit on all concerned. They stand about 1,800 feet from the uppermost or northern shaft, from which a rail is laid to bring the ore down to them. In machinery they embrace every modern compliance and improvement. The entire building is 200 feet long, 30 feet wide, and gives an immense business appearance to the town. The engine is 40-horse power, of Donahue & Co's best style. Of its effectiveness you may judge, when it is intended to pump from two shafts, hoist from another, run five jiggers, and all the various machinery connected with the entire works. It is true these works involve a large expense; but then, we must remember, besides the immense outside time and labor they will save the company, by reducing all the No. 2 ore, and freeing it from every particle of refuse rock, they raise the value of every ton of that ore from 12 to 18 or 20 per cent. After a careful examination, I rate the capacity of the Keystone at 550 tons per month.

I cannot close this account without paying Capt. Dick a tribute of praise he deserves for putting the mine in its present auspicious condition. He has unquestionably a thorough knowledge of copper mining in all its branches. If the company will only be patient, leave him alone, and let him stope up his ground clean as he goes, they will not regret it, when the ensuing year closes upon them. It is only just to say that Capt. Dick has lately also done equally good work on the Caleveras claim. Next in succession, proceeding up the valley, comes the

#### CONSOLIDATED.

This claim contains 1,800 feet divided into 1,800 shares. It adjoins the Keystone, being located at the same time, and is an extension of it. It contains three shafts, respectively of 18, 70 and 40 feet. It is, however, by no means developed, though presenting many favorable indications. In the 70 feet shaft, there is the strongest body of mundic I have yet seen. I confess my partiality to mundic, and think that copper will be struck sooner in this shaft, than in the one of 40 feet, where the blue slate is strangely impregnated with yellow sulphurets. Work is suspended until next Spring, when machinery will be put up. Next comes the

#### GREAT WESTERN.

This is also an original location, containing somewhere about 1,800 feet, divided into 13 shares. This claim lies idle, I understand, from want of capital, no other work being done than what is necessary to represent it. Following this claim are several others, which, as they are simply locations, and in the same condition, it will only be necessary to mention. They are the Salt Spring Valley, the Masonic, and the Jefferson. From here, some distance up the valley, it will be very difficult to locate the lead. The best advice I have heard given, is that of the Cornishman, who suggested the propriety of sinking 500 feet, and then drift north, south, east and west. I think it likely the lead might be struck under those circumstances.

We are now supposed to be some three miles from the Keystone, when we leave the valley to the left, and going up the Bear Mountain range some half mile, or more, reach the

#### CROCKETT.

This is quite a celebrated claim, opening beautifully, with an established vein of splendid ore. It is a distinct vein going to the east side of Bear Mountain from Copperopolis town. It contains 3,150 feet, and is incorporated. The mine is now fixed up for permanent work, and will develop

itself rapidly. A short distance from the Crockett, bearing east of south, is the

#### BEAR MOUNTAIN.

This claim is still undeveloped, and suspended for a time. It is on the same lead as the Crockett. It contains 3,000 feet, divided into 20 shares. Work to be recommenced in the Spring. Passing on in an almost easterly course over the hills we come to the

#### ANTELOPE.

This is also a celebrated mine, but has fluctuated up and down more, perhaps, than any other in the district. It is not on the Crockett, but runs east of it. Occasionally excellent ore was taken out, but nothing permanent. It was originally called Beauregard; the two are now consolidated. The claim contains 3,250 feet, divided into 200 shares. It unquestionably opens in beautiful style, carrying carbonates and oxides from the top, with well developed walls, at one time 20 feet apart, but now compressed to 9 feet. There is considerable gossan on the surface, quite auriferous. The rock, however, is still heavy, and corrupt, carrying copper and sulphates of zinc certainly; some say silver; of the latter I am no judge. At the request of Mr. Garrard, the Supt., I spent half a day with him here and at last found a vein of better ore than they have ever had, about a foot thick. This was in the side drift. Twenty-five feet more put on the shaft, I feel certain, will open a three feet vein. I beg to acknowledge the polite attentions of Mr. Garrard's family, and hope for their sake the Antelope will come out right. I think there is no fear of its not doing so in the end.

I must now take you, at least six or seven miles along the Angel's Camp round, to within sight of Altaville, to claims I visited on my arrival here, but which I could not notice before without confusion. I hope the Colnor boys will accept this apology for it as the fact. Turning into the woods some distance beyond Hinckle's ranch, are three claims, though I cannot pretend to locate the system they are on. The first is the

#### EMMETT.

This claim contains 2,200 feet, divided into 11 shares. The main shaft was down 50 feet then, now I suppose considerably more. The rock carried iron largely, but sufficient copper to make it good ultimately. Our lucky friend Elmore is concerned in this claim, so it is sure to turn out well. I hope so. Adjoining the Emmett is the extension

#### RIISING STAR.

This claim contains 3,200 feet, divided into 16 shares. They are not doing much until the Emmett gets down. This claim, however, lying as it does between the Emmett and Colnor, I think it must be a safe thing. Next and last in this direction is the

#### COLNOR.

I find my notes have become somewhat obscure, but I think the claim contains 3,200 feet divided into 16 shares. The old shaft had to be abandoned as it dipped to much in the hill to be workable. The new shaft, very well put down, through immensely hard rock, must now be down about 100 feet. This is the claim I mentioned in my first letter of the Stockton Fair, as having such splendid specimens there. The rock in its formation is very pure. I should like to see this mine again if possible, and as I go to Angels to see about your own claim there, I shall endeavor to give the boys a call. I have great faith in the Colnor. L. H.

A LONDON professor lectured recently on adulterations of food. He handed around coffee, which was pronounced excellent, then told the audience that they had been regaled with a mixture of bullock's blood and, chicory, sheep's liver, dried and old coffee grounds. He gave them capital porter too, made of spirits of wine, gum arabic and burnt sugar.

DRIED UP.—The Rocky Mountain News says: The Platte is not the only stream that has entirely failed this season. The Arkansas is entirely dry for two or three hundred miles. The Huerfano, and other large tributaries coming into the Arkansas from the South, are also dry. We presume that Red River, and other streams of the South, are in the same condition. In Utah, and further North, water has never before been so scarce since the country was known.

Some idea may be formed of the tremendous effects of the powder magazine explosion at the foot of Seventy-ninth street, N. Y., from the fact that a steamboat traveled all the way to New Haven on the Sound



**MACHINERY FOR OWEN'S RIVER.**—Four or five teams, heavily loaded with quartz mill machinery, (says the Esmeralda Times, of November 25th.) destined for Owen's River country, passed, through town this morning. Public attention is rapidly turning to the above section, and a big rush will be made there in the spring. Parties are going from here nearly every day. The confidence shown in those sending down machinery for mills is not without cause. That section is undoubtedly rich in both mineral and agricultural wealth.

—It is found by investigation that the number of men who have been actually killed in this war does not fall short of half a million.

**G. E. MOORE,**  
Assayer and Analytical Chemist,  
No. 612 Sacramento Street,  
HAVING ESTABLISHED A CHEMICAL LABORATORY,  
furnished with every requisite for delicate Analytical work, is prepared to execute the Assay and Analysis of Ores, Mineral Waters, Guanos, etc., with accuracy and dispatch.

REFERENCES:  
Prof. J. D. Whitney, State Geologist, San Francisco.  
Alsop & Co., San Francisco.  
Sather & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento.

**ASSAYS!**  
Promptness and Accuracy Secured  
BY THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!  
Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,** (FROM EUROPE.)  
24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. jyl  
"HINTS FOR PROSPECTORS" Free by Post.

**RIEHN, HEMME & CO.,**  
**ASSAYERS.**  
Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.  
Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO  
Messrs. F. PARROT & CO., Messrs. ALSOP & CO.,  
R. B. SWAIN, Esq., DONOHUE, RALSTON & CO.  
CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in  
Assaying, and in Mineralogy and Chemistry as far as  
required to become a practical Assayer.

**AGENTS WANTED.**  
We want a good Agent in every city, town and settle-  
ment, on this Coast. Applicants will send their names  
with reference, when specimen numbers of the **Min-  
ing & Scientific Press** will be forwarded to them,  
and their names added to our published "List of Agents."  
EWER & SMITH.

WM. H. MEAD, THEODORE VAN TASSEL.  
**MEAD & VAN TASSEL,**  
**HATTERS,**  
Montgomery st., cor. of Commercial,  
SAN FRANCISCO.

TO OUR FRIENDS AND THE PUBLIC GENERALLY.  
Having Purchased the entire interest of Messrs  
FISHER & Co. in this city, we shall, on the 1st day of  
May assume the management of the  
**HAT EMPORIUM,**  
so long conducted by that firm.

Mr. WILLIAM H. MEAD, for the last seven years Sales-  
man with Messrs Fisher & Co., respectfully solicits a con-  
tinuance of the patronage so long and liberally bestowed  
upon the old House, feeling entire confidence in our ability  
to suit in every particular.

Mr. THEODORE VAN TASSEL, for eight years with  
Messrs Le Gay & Co., would be pleased to see his friends  
at his new place of business.

The long practical experience of Messrs Mead & Van  
Tassel in the Trade justifies them in saying that their  
work cannot be excelled either in finish or durability.  
Having perfected arrangements, we shall be in constant  
receipt, by every steamer of soft goods of the very finest

**French and American Manufacture.**  
Our Stock now on hand is superb.  
Call and examine, and judge of the merits of our claim  
to the title of "LEADERS OF FASHION."  
Respectfully,

**MEAD & VAN TASSEL.**  
Montgomery street, cor. Commercial.

nov2

## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on  
this coast, renders it of the highest importance that the  
Machinery employed for this purpose should be of  
the most Effective, Economical and Durable Character.  
It may be safely said that Millions of Dollars have al-  
ready been expended upon the various experiments in this  
class of Machinery, and it is a fact well known to all  
who have had any practical experience in the matter,  
that every new process developed during the past twelve  
years, has been set down as a failure. The Ordinary  
Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has  
suggested, is now regarded, by common consent, as the  
only reliable

### METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed  
to combine all the improvements which the experience  
of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the  
country, and have been, for the three past years, sub-  
jected to the most severe of all tests—that of constant  
use—and in every case have been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the  
mineral regions of California, Nevada and Mexico, and  
have established a claim to public confidence, never yet  
equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron,  
and, consequently, are not affected by the intense heat  
and dryness of atmosphere, common to all mining local-  
ities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of  
Stamps, 25 per cent, more rock than any other mill in  
use. Each Battery is complete in itself, and forms a  
perfect mill—while any number of them can be added  
at a subsequent time—thus preserving the symmetry and  
uniformity of the Mill

As an evidence of the increasing favor with which  
these mills are regarded, we would mention that the  
Celebrated Ophir Company first introduced them into  
their works in 1880, and have been adding a number of  
Batteries, each subsequent year, until they now have  
Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, be-  
fore shipping, each piece being marked and numbered,  
so that they can be put up and set at work in ten hours  
after arriving on the ground. They are made of two sizes,  
four and five Stamps each. The Four Stamp  
Battery weighing complete about 6,000 pounds,  
and the Five Stamp about 7,000. The Mortar Bed being  
cast in sections, when desired, so that the mills can be  
packed over any mountain road.

We annex the names of a few well known Companies  
who have adopted them—running from four to seventy-  
five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcel Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mollus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico.  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino.

MANUFACTURED ONLY BY  
**GODDARD & CO.,**

At the Pacific Iron Works,

SAN FRANCISCO.

on 125 to 126 First street, and 126 to 144

Fremont street.

## MINING & SCIENTIFIC PRESS. THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

THIRD YEAR: VOLUME VI.—NEW SERIES.

A new volume of this extensively circulated paper  
commenced Sept. 11, 1882. It is intended that every  
number shall be replete with information concerning  
Mining, Scientific, Mechanical and Industrial pursuits,  
together with several original engravings, of new inven-  
tions, etc., prepared expressly for its columns.

This paper is devoted to the above purposes, together  
with the interests of Science, Art, Agriculture and Com-  
merce, and any general information that may be of in-  
terest to the reader: and it is the intention of the pro-  
prietor to spare no pains or expense in making it equal  
in interest and valuable information to any paper yet  
published.

### The Inventor!

Will find it an excellent medium for the purpose of  
bringing his invention into notice, of ascertaining the  
progress of invention in this and other countries, and  
also of receiving any information that may be neces-  
sary in obtaining his patent, the proprietors having had  
great experience as Patent Agents, together with facili-  
ties at Washington that enable them to obtain Patents  
with dispatch.

### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its col-  
umns will from time to time contain original engrav-  
ings of new machines and inventions, together with a  
large amount of reading matter appertaining thereto.  
We are constantly receiving the best scientific jour-  
nals from all quarters, from which we shall continue  
to extract whatever may be of benefit or interest to  
our readers.

### The Mining Interest!

Will find it of great value, as it will contain all the  
news appertaining to Mining, the prices and sales of Mi-  
ning Stocks, new inventions of Machinery adapted to that  
purpose, and of everything generally that may be of ser-  
vice to the Miner.

### To Chemists, Architects and Millwrights.

This journal will be invaluable. All new discoveries  
in Chemistry will be given, and a large amount of infor-  
mation of great service to Architects and Millwrights  
will be found in our columns. The Farmers and Plan-  
ters will not be neglected, engravings will be given of  
agricultural implements, and the farming interest gen-  
erally will be amply discussed.

### Terms.

To mail subscribers:—Four Dollars per annum;  
**Club Rates.**  
Five Copies for Six Months, \$8.  
Ten Copies for Six Months, \$16.  
Ten Copies for Twelve Months, \$30.  
Names can be sent in at different times and from  
different Post-offices. Specimen copies will be sent  
gratis to any part of the country.

**EWER & SMITH, Publishers,**  
Room 57, Government House, Corner of Washington  
and Sansome streets, San Francisco.

**I. C. E. KLEPZIG & CO.,**  
**GUN MAKERS,**

DEALERS IN GUN MATERIALS,  
733 Washington street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the short-  
est notice.  
Gilding, and also Silver Plating, by E. Ekland. je21

**LEANDER RANSOM,**  
**Civil Engineer**

AND  
**SURVEYOR,**

Having been connected with the public works  
of the State of Ohio for 20 years, and the public  
surveys of the State of California for 7 years.

ALSO  
**STATE LOCATING AGENT.**

And as such having the sale of  
**600,000 ACRES OF STATE SCHOOL  
LANDS,**

At the low price of \$1.25 per Acre.  
Terms—Twenty per cent in cash and the balance  
on a credit of several years.  
OFFICE, 323 Montgomery streets. oct-3

**D. NORCROSS,**  
Masonic Temple, No. 6, Post Street.

**Military Goods of all Descriptions.**  
Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.  
aug 17

## PEOPLE'S OPPOSITION Steamship Line!

Special Notice.—The line has  
been withdrawn from the Ni-  
caragua Route until further notice.

### GREAT REDUCTION IN RATES!!

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
J. H. BLETHEN..... COMMANDER  
Will be dispatch for PANAMA  
From Mission street Wharf,  
**WEDNESDAY, - DECEMBER 23, 1883.**  
Punctually at 9 o'clock, A. M., on  
Connecting at A-shipwall, by the Panama Railroad, with  
the Splendid Steamship  
**ILLINOIS - - - - - 2500 Tons.**

The Moses Taylor, since her last trip has undergone  
the most extensive repairs. Her decks have been ex-  
tended forward and aft; cabins colored, refitted and  
repainted throughout—making her accommodations equal  
to any Steamer on the ocean.

For further information or Passage, apply to  
K. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

## BOOK KEEPING, AND COMMERCIAL CALCULATIONS,

Taught by J. S. LUTY  
**PRACTICAL ACCOUNTANT,**  
305 Montgomery Street, Corner of Pine.

### TO QUARTZ MINERS.

All persons interested in Mining Ma-  
chinery are invited to call at Donahue's Foundry and  
examine my improved Amalgamator. It is unquestion-  
ably superior to anything now known for amalgamating  
Silver and Gold. It works 1000 pounds at a time, and  
will amalgamate over three tons a day. By the motion  
of the revolving miller, the pulp is drawn through its  
centre and passes under it, between the grinding sur-  
face, to the circumference; from whence it passes again  
over the miller to the centre, through the holes and be-  
tween the grinding surface to the circumference as be-  
fore. Thus a constant circulation of the pulp is kept up,  
bringing the particles of ore again and again under the  
muller, and reducing the whole mass to an impalpable  
powder.

No quicksilver lies between the surfaces to be ground,  
but at the circumference and centre of the pan where the  
metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in De-  
cember last, and all persons are again warned against  
purchasing or making use of the Miners' Foundry called  
"Wheeler's Amalgamator," as they are an infringement  
on my patent, and a suit is now pending in the U. S. Cir-  
cuit Court against the parties infringing. My Amalga-  
mators can be seen running at Donahue's Foundry, where  
all can judge of their operation and the very superior  
style in which they are being manufactured.  
sep21 THOMAS VARNY.

## PATRONIZE HOME MANUFACTURES!!!

**James Longshore,**  
Trunk and Valise Manufacturer,  
307 Sansome Street, under Tehama House. Trunks and  
Valises, Wholesale and Retail, Fine Sole Leather Trunks,  
Valises, and a fine assortment of LADIES' TRUNKS con-  
stantly on hand. Trunks covered and repaired.  
aug 3

**APARTMENTS.**  
FURNISHED APARTMENTS, WITH OR WITHOUT  
Board, at 1018 Powell Street, between Clay and  
Washington Street. Persons desirous of a respectable  
home will do well to apply. jyl

## FOR SALE.

**PATENT PRESSED RUSSIA IRON MINING PANS.**  
Russia Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Blow Cocks; Couplings; Play Pipe  
Cooking Stoves and Heating Stoves  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the  
**UNEQUALLED  
MONITOR COOKING STOVE  
Or RAN E,  
FOR HOMES.**

To which we call particular attention.  
je-29 TAY, BROOKS & BACKUS.



## THE DEBT AND RESOURCES OF THE UNITED STATES.

The *Banker's Magazine* for October last, contains a carefully written article upon "The Debt and Resources of the United States," and introducing therein a comparative statement of the credit of Great Britain and the Federal Government, in their respective times of trial. We condense as follows:

The normal prices of the British 3 per cents being 93, and standing always above 89 from 1730 to 1745, they fell during the Scotch rebellion of 1745, to 76; at the close of the American war (1781) to 54; in 1797 to 47½, and in 1854 (Crimean war) to 85½.

The United States 6 per cent. 20 year coupon bonds were at 89 to 92 in September, 1861; in April, 1862, rose to 98; in June to 107½; fluctuated between July and December, from par to 104; and from January, 1863, to April, varied from 90 to 106½.

The price of gold in the respective markets presents the following relative ranges:

In the English market gold was above 25 per cent. premium for three years from 1811; for two of those years above 30 per cent; one year and a quarter above 36, and at 41½, from November, 1812, to March, 1863.

At New York, five months after the suspension of specie payments, gold was at 4 per cent. premium; during three and a half months, from 3d July to 20th October, 1862, it was under 30; for two months after, above 33; from 1st of January, 1863, to 3d of March, fluctuating from 33½ to 72½; after which it went down to 46 on the 1st of June.

This history, considered with reference to the respective conditions of the two nations, is all in favor of the Federal Government. A comparison of our present credit with that of our own Government in former exigencies, is even more surprising. The loans of 1799 and 1800 were sold at a discount of 17.20 per cent; those of 1813 at 12 and 11.75; those of March, 1814, at 18.86; and the total of the discounted loans 1799 to 4th March, 1861, at an average discount of 12.55 per cent; while the total of the present Secretary's loans sold under par, calculated upon the par of 6 per cents., fall to 5.9 per cent. average discount. On a full review of all the facts, are we not safe in saying that in the very midst of this hurricane of civil war, our Treasury is in smooth water?

## UNITED STATES CURRENCY.

As in case our National Debt, we are best able to grasp and understand the question of our currency, by comparing its present condition with that of the corresponding periods of English history—a history that worked itself into issues so well understood that we may readily see the facts of our own case, and forecast the results by the light thus afforded to us.

The figures that did the service of reducing John Bull to despair in 1815, stood thus, according to Mr. Lloyd, who is received as the best authority in this branch of statistics:

Bank of England notes and local bank circulation of the three Kingdoms: \$504,000,000; Exchequer Bills, \$202,000,000; Postal Circulation, \$706,000,000.

This amount, at the time the population of Great Britain, gave an average of \$37.16 per capita.

When the wealth of England was but \$10,400,000,000, the circulation was four times greater than in 1844—'51, when the wealth was more than double that of 1815, or in relative amount, full eight times greater. Here was abundant opportunity, and no slight apparent warrant, for an outcry. England's gold was drained to exhaustion by her war expenses and subsidies paid abroad. Bonaparte held the opinion that she must succumb when reduced to an utterly redemptionless note currency. The opponents of the government, the bullion-heads, and the whole body of alarmists and despondents held the same doctrine.

The famous Bullion of the House of Commons sustained it; arguing as ably as the best of our Democrats, for a cash, and against a credit, circulation; and recommending an instant return to cash payments, without regard to consequences, or any respect to impossibilities.

Now, let us see how our greenbacks and other currency compare—not with the assignats, nor even with the "Continental money," of our Revolution, but with "the depreciated and depreciating" Bank of England notes, every dollar of which was at their par of gold, three years after they were at their worst.

## THE BANK NOTE CIRCULATION OF THE UNITED STATES.

The bank note circulation of the United States, from 1852 to 1859, eight years, averaged 146,000,000, making \$9.06 per capita. On the 1st of May, 1863, the bank circulation of the loyal States (assumed to be the same as in December last) was \$168,400,000; the United States notes and fractional currency \$394,920,956. To these add one year of indebtedness, which may be taken to correspond, in the way of circulation, to the Exchequer bills of England, which amount to \$142,750,000—a grand total of \$706,070,956.

Thus it appears that our total circulation, in 1853, is exactly equal to that of England in 1815—our wealth three-tenths greater, and our per capita circulation more than one-fifth less. Moreover, their circulation quadrupled their own average of a much later date; ours slightly more than trebles our average of a period of three years gone.

Our inflated currency, so far as the banks are concerned, does not exceed our average in specie-paying times more than twenty-two millions, or fifteen per cent. As to the greenbacks, the history of the twenty-five loan, in the month of May, shows that the Secretary can find any surplus of them in circulation, at the rate of two millions a day; or, if he were in a hurry, by calling for bids he could do it, at twenty days' notice, at once, which brings us to the conclusion that the day on which the war closes, will be just the day before the resumption of specie payments, to all intents and purposes. The suspension of specie payments lasted twenty years in England. Her Bullionists bravely, for all those twenty years, in the very teeth of the facts, declared that a purely credit circulation could not be maintained, and under favor of war prices and speculation in gold, kept up the cry of "depreciation" to the bitter end.

Taking it for certain that this piece of history must get a rehearsal among us, we content ourselves with furnishing the material for better opinions, to better men, and precedents and forms of despair to those who must needs see things the way they don't like them, and don't like to see things just the way they are.

WICKS FOR KEROSENE OIL LAMPS.—One of the most frequent causes of the bad burning of mineral-oil lamps, says the American Gas Light Journal, arises from the employment of damp wicks. Cotton, like most other vegetable fabrics, readily absorbs from one-fifth to one-sixth its weight of moisture from the atmosphere; this prevents the free ascent of the oil, and leads to charring of the wick, and the production of an imperfect flame—hence, it is exceedingly important that a new wick should be thoroughly dried before it is placed in a lamp. When it has been once saturated with oil, the further absorption of moisture is prevented. The trouble of holding a wick before the fire till it ceases to give out any vapor is so trifling as not to be taken in consideration, and the improvement in the flame and regularity of burning is considerable.

THE PACIFIC MONTHLY has again changed Editors, and is now under the management of LISLE LESTER, a lady who has recently arrived among us from Wisconsin. The new editor is not without experience in her profession, having long been favorably known as a writer of decided ability. She has at different times edited several monthly and other periodical publications, in which positions, as well as in miscellaneous newspaper correspondence, she has displayed marked talent. The magazine before us, though but partially prepared under her charge, exhibits a taste and genius which is eminently promising of future success. We extend to her a cordial greeting, and our best wishes in her new field of labor.

THE GOLDEN AGE, Reese River, is now down about sixty feet, with a four foot vein. One hundred shares have changed hands during the week—principally at private sale; prices varying from \$30 to \$65. We notice quotations of the Stock Board at \$30. These shares are principally sought after by Reese River mill men and speculators from that region. A very fine specimen of chloride of silver ore, from this vein, has been left at this office, and having been subjected to the heat of a furnace, is completely covered upon one of its sides with globules of silver. The stockholders know, beyond a doubt, that this vein is rich, and hence the reluctance on their part to dispose of the shares.

THE most remarkable blast in the history of iron mining took place at the Lake Superior mine a short time since. In ordinary ones but one and one-half inch hole in diameter is drilled, but in this case, one of four inches, and eighteen feet deep was made, distant from the edge of the cliff about ten feet, into which one keg of powder was put and exploded as preliminary, and which had the effect to open a seam to the depth of fifty feet. Sixteen kegs of powder was then put in as a final charge, which threw down over 3,000 tons of ore, so completely broken up that the largest portion was small enough to load on the cars for shipment without further reduction.—*Marquette News and Journal*.

New York will soon be defended by eight hundred pieces of the heaviest ordnance. A gentleman who has recently passed through the large new fort near the Narrows, informs us that he counted fourteen guns described as three-hundred pounders, and that the bulk of the armament consists of twelve-inch and fourteen-inch guns. Platforms were being laid for fifteen-inch and twenty-inch guns.

## MEXICAN MINING ITEMS.

The schooner Mary Cleveland cleared, on Saturday, for Ventana Bay and La Paz, in Lower California. Her freight consists of machinery, lumber and mining tools for the Santa Cruz, La Marroneua and Pena silver mining companies in San Antonio District.

The mines in this District are of the most permanent character, and will compare favorably with the best of the Mexican mines; the ore being very rich, the mines wide and freight cheap to and from this city.

The District of San Antonio is fast filling up with California miners who have already developed about sixty mines; and as they have to rely upon the city of San Francisco for tools and machinery, the recent, numerous shipments of these articles to that place, and the heavy shipments of ore from there to Swansea and Freyburg, and the fine, large samples of rich lumps or specimens forwarded to this city, have made this stock much sought for in this market. The block of metal at 411 Clay street, sent up from the Marroneua mine, gives abundant evidence of the strength and permanency of that mine. Eastern capital, at the present time, appears to prefer Mexican mines to the less extensive and more unreliable veins in Washoe.

The Sierra Nevada, which cleared on Tuesday last, for Mazatlan, La Paz and Cape St. Lucas, took away not only six hundred tons of mining implements, but several of our most able metallurgists, who go to examine the northern mines in Sonora.

The most of the mines in Lower California and Sonora have passed into the hands of California capitalists within the last year, and many of them are now taking out large quantities of silver and have hundreds of tons of ore now ready for shipment. In Lower California the ore is Metal de Fuego, or fire metal, and it is found cheaper to ship it than to assess heavily for machinery to work it on the ground. We are warranted in saying that the lowest return of ores from Lower California to Frieberg was \$147 per ton, and the sum total of shipping, freight, working, commissions and extracting the ore is ten dollars per ton to take it out of the mine and place it at Ventana Bay, (18 miles from the mines); \$12 per ton from there to Frieberg; \$18 to work the ore in Frieberg; \$5 for railroad and municipal duties, and 1 per cent. commission—making \$46.50 per ton; leaving a clear profit of \$100 and upwards per ton, on the common ores, and much of it will double this sum in profit, as the late tests will show. Tests of the Triunfo, Guosane, Santa Cruz, La Marroneua, Maria, Picacho, San Antonio, Pena and Carozallita mines which have recently been made, yielded from three hundred to five hundred dollars per ton.

THE "DICK SIDES," or "Sides" as it is now generally denominated, have commenced suit against certain parties in Virginia City, who have "squatted" upon their ground, for possession of the same for mining purposes. The question of the occupation of mining ground in that city, for building purposes, is becoming a very embarrassing and important one. In the present instance, we are indirectly cognizant of the fact that a "written notice" was given to the parties who put up the first "squatter's improvement" upon their ground, that the company claimed, under the laws of the District, 100 feet on each side of their ledge, from stake to stake, for mining purposes, which claim was acknowledged by the parties in question, who owned the building that was subsequently known as the "Old Mormon Theatre," and who at the time agreed to remove the same whenever the ground was needed for mining purposes. A subsequent, possessory right of this description upon mining ground must be very precarious as the Courts have ever been liberal to miners in their allowance of ground for mining purposes, as indeed, they should be.

FRANKING.—No private citizen, high or low, can send a letter or document of any kind, or any other thing, to any officer or public man at Washington or elsewhere (excepting to members of the United States Senate and House of Representatives, the Secretary of the Senate and Clerk of the House of Representatives,) without prepaying full postage thereon, whether such matter is upon official business or otherwise. He must prepay letters to the President of the United States, his Cabinet officers and all others in public stations with the above exceptions.



No Less than seventy steam fire engines have been made up to this time by the Amoskeag Company, of Manchester, New Hampshire, including some for almost every city in the Union, two for Halifax, and one for the Russian city of Amoor. Where do not American inventions penetrate?



**BULLION.**—During the month of November Wells, Fargo & Co. shipped from their office in Virginia, \$746,751, weighing nearly twenty tons. It should be borne in mind in this connection that this is only about two-thirds of the actual value of the bullion shipped.—*Ter. Enterprise.*

**MINING AGENCY.**—By reference to our advertising columns it will be seen, that we have made arrangements to obtain special information, through a resident correspondent, with regard to any particular mine at Reese River. Parties in the city about to invest in "feet" in that neighborhood, and not having time or caring to incur the expense of visiting the locality, will do well to avail themselves of the opportunity hereby presented securing reliable information, previous to investment, at a moderate cost.

Persons already holding "feet" and desirous to learn through a disinterested source the actual condition of the mine in which they may be interested, will do well to embrace the opportunity here presented of securing the desired information.

We shall establish agencies similar to the above in all the principal mining districts, at an early day.

**Emmett Copper Mining Company.**—Notice is hereby given that at a meeting of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No. 523 Montgomery street, San Francisco, December 3, 1863, an assessment of twenty-five cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to L. HONIGSBARGER, Copper-polis.

By order of the Board of Trustees.  
M. G. ELMORE, Secretary.

**Ruth Windsor Tunnel Company, Esmeralda district.**—Notice is hereby given that an assessment of fifty cents per share was levied on the capital stock of the above company on the 21st day of September, 1863, payable immediately to the Secretary at his office in United States gold coin.

By order of the Trustees.  
T. L. Bibbings, Secretary, 305 Montgomery St. San Francisco, October 13, 1863.

### Mining Shares For Sale

BY  
O. A. CRANE,

Office 28 Government Block.

- 475 Shares U. S. Mining Company, Virginia City.
- 910 Shares Granada Gold and Silver Mining Company Virginia Hill, Virginia City.
- 168 Shares Evoca Consolidated Copper Mining Company, Crescent City, Cal.
- 20 Shares Mohave Mining Company, La Paz District, Colorado, N. M.
- 30 Shares Aspinwall Gold and Silver Mining Company, Devil's Gate District, N. T.
- 75 Shares Washington Copper Mining Company, Indian Bar, Tulame County.
- 228 Shares Montezuma Gold and Silver Mining Company, Inyo District, Tulare Co.
- 90 Shares Owen's County Consolidated Gold and Silver Mining Company, Inyo District, Tulare Co.
- 50 Shares Crown Point Ravine Gold and Silver Mining Company, Virginia District, N. T.
- 10 Shares Triunfo Gold and Silver Mining Company, San Antonio District, Lower California.

SAAC TADOR. JOHN HILL.

### Tabor & Hill

ock Brokers & Real Estate Agents,

502 Montgomery St., cor. Sacramento,

Buy and Sell Mining Stock on Commission. Are members of the San Francisco Stock & Exchange Board, and of the, San Francisco Board of brokers. nov23

### Giffards Injectors,

FOR SUPPLYING OILERS WITH FEED WATER without Pumps No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODDART, Agent,  
je22 Cor. Pine and Front Sts., San Francisco.

### Owens River Canal Company.

FOR SALE,

FOR ACCOUNT OF THE COMPANY, 7,000 SHARES OF the above stock, at \$1 per share. It is obviously presented to the public as the best investment, for the price, now offered in this market.  
Office of the Company No. 328 Montgomery street.

### REMOVAL.

OFFICE OF THE PACIFIC METALurgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.

Gold and Silver ore, and Sulphuret Assayers', or Silversmiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

### GENERAL NOTICES.



DR. H. AUSTIN,  
DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcunite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

### DESKS

AND

Office Furniture,  
OF ALL KINDS.....FOR SALE BY

JOHN WIGMORE,

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBING, of all Kinds, attended to.

### SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,  
Opposite the What Cheer House, San Francisco.

FREDERICK MANSELL,  
MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

El Paso District, Los Angeles County,  
MINING AGENCY.

C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

Letters of exchange, containing Revenue or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to.

The subscriber has a carefully prepared map, (and specimens) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to J. Burnett, Esq., 425 Davis St., San Francisco Cal.  
El Paso, June 21, 1863. C. W. TAPPAN. a31

R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,  
JOB TURNING & SCROLL SAWING.

BRACKETS,  
RED WOOD BALUSTERS,  
NEWEL AND CEDAR BALUSTERS  
for Stairs.

Manufacturers of every description of Oval,  
Circular and Square

PICTURE & LOOKING GLASS FRAMES

For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS. H. C. SOMES

### MINING LAWS AND FORMS

JUST PUBLISHED BY H. H. BANCROFT & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Terms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth. \$1.50 For sale at all the Bookstores. sept4

H. C. KIBBE,

MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

### GENERAL NOTICES.

### New Patent Agency.

WE HAVE CONNECTED WITH THE Publication of the "MINING AND SCIENTIFIC PRESS"

The Patent Agency Business, And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

Mining and Scientific Press Agency The most desirable place to make application for Letters Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

### FOREIGN PATENTS OBTAINED

By application at this office, Room 57 Government House. EWER & SMITH, Solicitors.

### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

### PATENT RIGHTS.

Patent Rights Bought and Sold, At the office of the "Mining and Scientific Press" Agency EWER & SMITH.

### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions Illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventor. EWER & SMITH.

### WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* These Pans have been in daily operation at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. 2016-1f ZENAS WHEELER.

Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Web b

SAN FRANCISCO.

GEO. A. MFTCALF.

D. S. HUTCHINSON.

METALF & HUTCHINSON'S

PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

\$3. Per Dozen!

Large sized Photographs \$3.—Extra copies \$1 each. AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India ink by a competent artist. aug.

### HOTELS.

International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

FIRE-PROOF BRICK BUILDING.

Most convenient to the Steamer's Landing, Business sts. & Places of Amusement

OPEN ALL NIGHT.

City Railroad Cars Pass the Door.

REDUCTION IN PRICES.

Fine Bathing Rooms attached to the Barber Shop Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

BEST FURNISHED FAMILY ROOMS;

and SETS AS GOOD A TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles, WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurbished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE. F. E. WEYGANT.

### THE RAILROAD HOUSE.

Nos. 46 and 48 Commercial and Clay Sts.,  
SAN FRANCISCO.

STEPHEN SMITH.....PROPRIETOR.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House Free of Charge.

The House is open all night.

P. M. S. CO.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

FOR PANAMA.

The following Steamships will be dispatched in the month of November, 1863.

Dec. 3d - - - - Steamer Orizaba.

Dec. 13th, - - - Steamer Golden City.

Dec. 23d - - - - Steamer St. Louis.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY, And connect, via Panama Railroad, at Aspinwall, with teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidsdorff st.



FOUNDRIES & MACHINE SHOPS.

**REYNOLDS' Patent Cut-Off and Governor, FOR STEAM ENGINES.**

127 of these Invaluable Machines, ARE NOW IN USE In California and Nevada Territory, giving a perfectly regular motion and Saving 20 to 65 per cent of the Fuel.

**Steen's Improved Governor** Is the CHEAPEST, SIMPLEST and QUICKEST to act and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

**Clark's Steam and Fire Regulator,** For controlling the Draft or Blast by opening the Chimney or Valve in the Blast pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It CANNOT get out of order and any person can put one up in an hour after the damper is put in.

**Ingersoll's Patent Drill Press,** With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

**Felt for Steam Boilers, Pipes, Etc.,** At the lowest market rates.

**Steam Engines, Boilers, Pipes,** Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

**Anti Incrustation Powder,** A Sure Remedy for Scale in Steam Boilers, without injury to the iron. In use for the past EIGHT years. Refer to—Sugar Refinery, San Francisco, Cottell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States. **E. T. STEEN AGENT.** No. 33 Fremont Street, San Francisco.

**PORTLAND BOILER WORKS.**

**MOYNIHAN & AITKEN,** Boiler Makers & Sheet Iron Workers, Mission, between Beal & Fremont Sts., San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms. Jy 29

**PUMPS!**

**HARRISON'S California Lift and Force Pump,** WITHOUT VALVES OR PACKING, Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet introduced.

**ALL SIZES;** Capable of throwing from ONE HUNDRED to FIVE THOUSAND Gallons per Minute—For sale by

**C. H. HARRISON,** PHOENIX OIL WORKS, 517 Front Street, San Francisco, Je 15

**50 lbs. MARINE and Fire-Proof Paint,**

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, on ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and little equal to Copper, no worms will ever effect it, and deeper than any other paint.

**DIRECTIONS:**

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil. For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

**25 POUNDS FIRE-PROOF PAINT.**

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

**DIRECTIONS:**

HOUSE:—Mix three parts Mineral Paint with one part white lead, mix with Linseed oil: if a lighter color is wanted, mix less paint, more lead. ROOF:—Five parts of Mineral Paint, one part white lead, mix with Linseed oil. Put it thick on a tin Roof once coat when properly applied will last three years.

S. C. BRADSHAW, Agt., G. T. FOUQUE, Superintendent.

**WORKS, North Beach; Office, 509 Sacramento st., San Francisco.**

FOUNDRIES & MACHINE SHOPS.

**PALMER, HANSCOM & CO., GOLDEN STATE IRON WORKS,**

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

**GENUINE WHITE IRON SHOES AND DIES.**

PALMER, HANSCOMB & CO.

**To Quartz Miners.**

**Knox's Improved AMALGAMATING PAN,** WITH

**PALMER'S PATENT STEAM CHEST.**

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

If it steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be other wise lost. Made exclusively by

**PALMER, HANSCOM & CO., GOLDEN STATE IRON WORKS,** Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms, for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. **W. A. PALMER.**

**JOHN P. GALLAGHER.....JOSEPH H. WEED.**

**GALLAGHER & WEED,**

**BRASS & BELL FOUNDRY**

**AND LOCK FACTORY.**

No. 125 First Street, opposite Minna, next door to Pacific Foundry, all kinds of

**Brass and Composition Castings and Finishing, done with neatness and dispatch.**

**CHURCH AND STEAMBOAT BELLS, OF ALL SIZES** Made to order. Engineers' Gongs made and hung in the best manner. Banks, Vault, Store and Prison Locks, also brass Padlocks and Shop Locks of various patterns, on hand and made to order.

Particular attention given to casting Rudder Braces and Ship Work in general.

All Jobs promptly attended to.—Prices moderate.

Removed from Oregon street, between Front and Davis.

**Miners' Foundry**

—AND—

**MACHINE WORKS,**

**First St., between Howard & Folsom,**

**SAN FRANCISCO.**

**EVERY DESCRIPTION OF IRON AND BRASS MACHINERY,** the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as: Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere

**HOWLAND, ANGEL & KING** San Francisco, February 23, 1883.

**San Francisco Machine**

....AND....

**IRON WORKS!**

Northeast corner Fremont and Mission Streets.

**ALL KINDS OF MACHINERY MADE TO ORDER ON** most reasonable terms.

Steam Engines, High and Low Pressure; Quartz Mills, Saw mills, Mining Pumps, Hoisting machines for raising purposes, Wine Presses, Agricultural implements etc, etc, and Castings of all descriptions made to order

Steam Engines exchanged and for sale by

**DEVOR, DINSMORE & CO.**

REPAIRING promptly attended to.

**FOR SALE.**

San Francisco, July, 1883. Jy 13

FOUNDRIES & MACHINE SHOPS.

**VULCAN IRON WORKS COMPANY**

**P. Torquet, Manager,**

**STEAM ENGINE BUILDERS**

and

**BOILER MAKERS,**

**Iron Founders and General Engineers,**

**No 137 & 139 First street, San Francisco.**

Pumping, Hoisting, Mining and Quartz-crushing Machinery.

Shoes and Dies of the hardest iron, Russia Iron Punched Screens.

Steamboat Machinery: Saw, Flour and Sugar Mills. High and Low Pressure Boilers of all Styles.

Jenval and other Turbine Water Wheels with latest improvements.

**W. T. & J. GARRATT, City Brass and Bell Founders**

**Cor. First & Market sts., San Francisco.**

**BABBIT METAL CASTINGS, FIRE ENGINES, FORCE** and Lift Pumps, Church and Steamboat Bells, Tavern and Hand Bells and Gongs, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil Globes, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of ALL SIZES. Manufacturers of "Garrett's Patent Improved Journal Metal."

**D. MORRIS, MACHINE SHOP,**

**227 Market, corner of Beale Street.**

Manufacturer of

**WARRANTED FIRE-PROOF SAFES**

Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. Je 13

**LEWIS COFFEY AND RISDON, STEAM BOILER AND SHEET IRON WORKS.**

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

**LEWIS COFFEY J. N. RISDON.**

**THEODOR KALLENBERG**

**Maker of Models**

**FOR INVENTORS.**

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Slitting, Embossing Stamps. Repairing of Machinery promptly attended to.**

**No. 418 Market street, San Francisco.**

**HEPBURN & PETERSON'S AMALGAMATOR.**

The subscribers would call the attention of the Mining Public to their Reducer and Amalgamator, and also to their Separator for reducing and separating the mineral from

**GOLD AND SILVER ORES,** manufactured and exhibited at the Vulcan Iron Works, Nos 137 and 139 First street, San Francisco.

These machines secure to the miner a more Expeditious and Perfect Reduction and Amalgamation, a less liability to accident and delay, and a greater amount of useful effect in proportion to the power employed to keep them in operation than any other machines now in use for producing similar results. This fact is attested to by their general adoption and preference at all the principal Reduction Works in Nevada Territory; among which may be mentioned the Gould & Curry Mill, the Silver state Reduction Works, Yephly Flat Mill, Pioneer Mill, Eastern Slope Mill, Phoenix Mill, etc.

**nov 8 3m HEPBURN & PETERSON.**

**KUSTEL & DEETKEN'S METALLURGICAL WORKS,**

**FOR THE REDUCTION OF**

**SILVER AND GOLD ORES,**

Tailings, Sulphurets, Arsenurets, Etc., Etc., Cupellation and Refining of Silver and Gold,

**Practical Assays for Silver and Gold,** in Small and Large Quantities, by Smelting, Chlorination and Pan Manipulation.

**WORKS—On the San Bruno Road, OFFICE—No. 605 Montgomery st, San Francisco.**

**nov 7 If.**

FOUNDRIES & MACHINE SHOPS.

**PATENT CLAIMS.**—We will furnish, on application, the claims of any invention that has been patented within the last fourteen years. The name of the patentee—date of patent, when known, and two dollars for copying should be sent.

**MODELS.**—Inventors will please attach to all models sent to us, their names and address, in a legible, permanent form, this will avoid confusion and prevent errors.

**DRAWINGS.**—We have highly talented and efficient Draftsmen, by whom drawings of every description are executed in the best style of art, with promptitude and at a moderate cost.

**WANTED**

By a competent person, the Secretaryship of four Mining Companies. Books to be kept at the Office of the Mining and Scientific Press, No 57 Government House inquire as above. oct 5

**SOUTH PARK Quartz Mill and Reduction Work**

**GOLD AND SILVER ORES WORKED AT REASONABLE** rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

**J. H. SMITH & CO.,** Office at the Mill, South Beach and Third St. Jc 13

**W. R. WATERS Secretary.**

**W. W. HANSCOM,**

**Steam and Mechanical Engineer,**

Designs furnished, and Drawings made for Engines, Mills, Water Wheels, Mining Machinery, etc., etc. Agent for MacKenzie's Patent Cupolo and Blower.

**At Golden State Iron Works,** aug x First Street, San Francisco.

**Eye, Ear and Throat.**

**DR. DE CASTRO,** Oculist and Aurist,

**WHO HAS PRACTISED IN NEW** York and all the principal cities of Europe with such unrivalled success, and from each place is in possession of the most eminent testimonials, may now be consulted upon diseases of these delicate organs, with a view to their permanent cure. De Castro, of long standing and thoroughly cured. The Doctor employs his (by the Medical Society of London approved)

**Self-adjusting Artificial Tympanum,**

For the relief of deafness, attended by lesser injury of the membrana tympani, and for the cure of discharge from the ear—the invention of Dr. Castro, M. D., author of "Deafness Practically Illustrated as to its Nature and Treatment," etc.

The self-adjusting Artificial Tympanum was first introduced to the notice of the profession at the meeting of the Medical Society of London, on the 20th of November, 1863. An animated discussion ensued on the reading of the paper, and several members of the Society bore testimony to the success of the remedy and the importance of the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-Adjusting Artificial Tympanum, as he had observed the immense benefit a young lady friend of his had received from it. She was in fact, quite deaf, and in a most miserable state; the effect of the tympanum was instantaneous—quite like a miracle. Five more testimonials from Members of the Medical College, New York, and the principal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and Kearny streets. Entrance on Block street.

**Mr. Editor—Having been afflicted** with deafness for the last two years, originating from a severe cold, and for the last month suffering from the most excruciating pains in my ear, I was obliged to come down to San Francisco to seek relief. After a physician's recommendation to wait on Dr. De Castro, on the corner of Kearny and Market streets, and underwent one operation, and it was with the utmost pleasure I can say my hearing was suddenly and without pain entirely restored. I deem it my duty to make this known to the public, and to recommend Dr. De Castro's skill as an aurist.

**JOHN REESE, Napa Valley** James Callaghan, witness, San Francisco, July 30th, 1883.

**[From the Daily Alta.]** San Francisco, June 30th, 1883

**Dr. De Castro:** Permit me through your widely circulated journal, to say, that my daughter Mary Ellen, has been afflicted with deafness since she was thirteen months old, and that she has been a member of the Deaf and Dumb Institute since it was organized. On taking her to Dr. De Castro, on the corner of Kearney and Market Streets, and undergoing one of his direction, two operations, she has heard sound very distinctly; and is now, I am happy to state in a fair way to get permanent relief. The result, thus far, is satisfactory; and I deem this notice due to Dr. De Castro for his skill; and would recommend all parents similarly afflicted to give him a trial. My daughter has at different times been under the care of the most skillful physician and aurists in California, but up to the period of visit to Dr. De Castro, received no benefit.

**CHAS JOHN P. WRIGHT,** 812 Green Street.



MINING NOTICES.

Notice is hereby given that by order of the Board of Trustees of the MAYFLOWER GOLD & SILVER MINING COMPANY, there will be sold to the highest bidder at the auction of Jerome Rice & Co., Montgomery St., on the 9th day of December, 1883, at 12 o'clock, M., a sufficient number of shares of the Capital Stock of said company, standing on its books in the names of the following persons respectively, to pay all assessments owed and unpaid thereon, on the 4th day of October, A. D. 1883, together with expenses of advertisement and sale.

Names.	No. Cert.	Shares.	Am't.
A B Wood.....	5	3	2.50
W W Flewelling.....	8	6	3.00
A B Wood.....	16	2	1.00
A B Wood.....	17	3	1.50
S E Holcomb.....	20	10	2.5
T L Bibbia.....	26	25	6.25
T L Bibbia.....	27	5	1.25
A B Wood.....	28	10	5.00
I G Davis.....	32	10	2.50
G B Gendie.....	35	10	5.00
N W Brown.....	36	10	5.00
L F Gilmore.....	38	5	2.50
I A Rawson.....	47	10	2.50
S N Bosworth.....	56	10	5.00
S N Bosworth.....	58	3	1.50
S N Bosworth.....	59	2	1.00
W H Yates.....	65	10	5.00
A B Wood.....	67	10	5.00
M G Elmore.....	71	5	2.50
A D Hill.....	73	23	5.75
Ann Steele.....	21	5	2.50
Mary I Morton.....	22	3	1.50

By order of the Board of Trustees.  
S. N. BOSWORTH, Secretary

N. LOMBARD INGOLS.

Accountant and Mining Secretary,

No. 10 GOVERNMENT HOUSE, Cor. Washington & Sanson Sts.

OFFICE OF THE

Santa Cruz Petroleum Oil Works Co.,  
Gem Silver Mining Co., (Reese River, N. T.)  
Laurel G & S Mining Co., Copala, Sinaloa, Mex.

N. E. Mr. Ingols will pay particular attention to the adjustment of complicated accounts, Commercial and Incorporated Companies' Books, to drawing up Commercial writings and to Engineering legal or other documents with neatness and dispatch. An experience of more than twenty years in every branch of his profession is a guarantee of his practical and thorough acquaintance with its duties. He has the privilege of referring to some of the leading mercantile houses and legal practitioners on the Atlantic and Pacific sides, for testimony of his business and clerical abilities.

Mammoth Consolidated Gold & Silver Mining Co., Excelsior District, N. T.—Office 508 Montgomery St., San Francisco, Nov. 28, 1883, Notice is hereby given: there will be sold at Public Auction, at the office of the Company, in San Francisco, on Saturday January 9th., 1884 at 12 o'clock, M. of that day, to the highest bidder, for cash in U. S. gold coin, so many Shares of the Capital Stock of said Company standing in the names of the following shareholders as will be necessary to pay assessment No. 1., of ten (10) cents per share, duly levied thereon by the Board of Trustees on the 9th. of May, 1883; also assessment No. 2., of thirty (30) cents per share, duly levied thereon by the Board of Trustees on the 27th of June, 1883, together with all the expenses of advertising and sale, unless said assessments are previously paid to M. G. Elmore, Sec., San Francisco, or to W. H. Dalrymple, Financial Sec., Aurora.

Names	No. Cert.	No. Ass't.	Shares.	Am't.
M J Brown.....	6 & 7	2	25	\$7 50
J B Best.....	74 343	1 2	300	115 00
G W Raily.....	344	1 2	200	80 00
G O Chism.....	330 to 37 incl	1 2	100	30 00
J F Codrington.....	354	1 2	50	5 00
D C Crunker.....	334	1 2	250	100 00
T A Cutter.....	25 393 to 403 incl	2	125	37 50
J R Duddleston.....	27 28	1 2	50	20 00
U B Treanor.....	50 to 57 incl	1 2	200	80 00
WD Garland.....	437 442	2	275	82 50
WD Garland.....	450 451	2	275	82 50
D H Haskell.....	65 to 69 incl	1 2	50	20 00
W A Holt.....	70 71 72	2	25	7 50
James Jaques.....	333	1 2	250	100 00
R P Johnson.....	443	2	100	30 00
A B Kelly.....	275 to 281 incl	2	100	30 00
J H Latham.....	283 284 285	2	60	16 93
E J Matthews.....	342	2	500	60 00
W Mason.....	92 462	2	13	3 30
John Patten.....	416 417	2	15	4 50
Geo Raymond.....	126 to 131 incl	2	125	37 50
G H Rogers.....	132 to 142 incl	2	200	60 00
S B Shultz.....	143 to 151 incl	2	95	38 00
G D Myers.....	361 487	1 2	5	5 00
A S Severa.....	170 to 189 incl	1 2	200	60 00
N Steiner.....	118 to 124 incl	1 2	100	40 00
W J Smith.....	191 191 192	2	75	20 00
J W Tucker.....	297 to 300 incl	1 2	400	160 00
H S Van Dine.....	218 348	1 2	175	68 75
H Watson.....	263 to 267 incl	2	25	7 50
W J Vernon.....	241 242	2	40	10 80

By order of Board of Trustees.  
M. G. ELMORE, Secretary.

A New and Valuable Book.

Process of Silver and Gold Extraction, by Guido Kustel, Mining Engineer and Metallurgist, former manager of the Ophir Works, &c.; 350 pages octavo illustrated.

This admirable work has met with the highest commendations from the Press and Scientific men, as a clear and able exposition of the science as practised in California and Nevada Territory—it is written for the people in good plain English and finely illustrated. Price—post paid—Cloth \$5; Shewn \$7.

A. ROMAN & CO.,  
Booksellers, Importers and Publishers,  
417 and 419 Montgomery street,  
San Francisco.  
nov30

MINING NOTICES.

Pioneer Coso Gold and Silver Mining Company, Coso District, Thulare County, Cal.—Notice is hereby given that in accordance with the laws of the State of California and duly made by the Board of Trustees of the Pioneer Coso Gold and Silver Mining Company, there will be sold at public auction, at the salesroom of Jerome Rice & Co., No. 327 Montgomery street San Francisco, on WEDNESDAY, the second day of December, 1883, at 11 o'clock A. M., so many shares in the capital stock of the above named company, standing in the names of the following persons, as will be necessary to pay all assessments now due on said stock, together with all expenses of advertisement and sale, unless sooner paid:

J. W. Basford, 100 shares, \$25; T. J. Brother, 165 shares, \$41 25; Jas. Brownlee, 25 shares, \$6 25; J. N. Brown, 18 shares, \$2 50; G. H. Bodfish, 100 shares, \$25; E. M. Barker, 91 shares, \$22 75; E. W. Chase, 34 shares, \$8 50; J. Chapman, 25 shares, \$6 25; A. B. Caldwell, 230 shares, \$72 50; J. M. Douglas, 20 shares, \$5; J. H. Earle, 63 shares, \$15 75; J. L. Garney, 75 shares, (assessments Nos. 1 and 2), \$56 25; J. N. Garthwait, 25 shares, \$6 25; T. V. Hamilton, 20 shares, \$5; D. P. Hughes, 75 shares, \$18 75; Geo. H. Hare, 143 shares, \$35 75; H. Kent, 16 shares, \$4; H. C. Kinyon, 25 shares, \$6 25; M. H. Liscomb, 26 shares, \$25; M. Laird, 20 shares, \$5; T. P. 20 shares, \$5; S. Levy & Bro., 10 shares, \$2 50; J. R. Lowe, 50 shares, \$12 50; W. L. Luckett, 25 shares, assessment Nos. 1 and 2, \$18 75; S. B. McKee, 10 shares, \$2 50; Lee McGowan, 20 shares, \$5; J. S. Robinson, 62 shares, \$15 50; W. Redding, 50 shares, \$12 50; H. Rache, 10 shares, \$2 50; C. T. Ryland, 40 shares, \$10; E. Stock, 25 shares, \$6 25; J. C. Smith, 69 shares, \$17 25; H. C. Van Dusen, certificate No. 86, 6 shares, \$1 50; T. W. Wodekind, 24 shares, \$6; C. B. Younger, certificates Nos. 90, 224 and 226, 28 shares, \$7.
---

J. S. LUTY, Secretary,  
305 Montgomery street, S. F.  
San Francisco, October 30, 1883. nov2 1m

Anderson Copper Mining Company. Notice is hereby given that on TUESDAY, the First day of December, A. D. 1883, at two o'clock P. M., at the salesrooms of Jerome Rice & Co. No. 327 Montgomery Street, there will be sold at Public Auction, by order of the Board of Trustees of the Anderson Copper Mining Company, so many Shares of the Capital Stock of the said Company, standing on the books in the names of the persons specified below, respectively, as shall be sufficient to pay all assessments levied thereon by the Board of Trustees, which were due and unpaid on the First day of September, A. D. 1883, together with expenses thereon of advertising and sale:

Names.	No. Shares.	Am't due.
J. C. McClung.....	175	36 25
E. R. W. Bow.....	200	30 00
Thomas Kyle.....	200	20 00
E. A. Morse.....	200	40 00
Edward Randon.....	200	30 00
Wm. McDonald.....	200	40 00
M. De Young.....	75	15 00
F. R. Mitchell.....	26	3 75
W. Wilmot.....	20	2 00
J. W. Sheppard.....	10	1 50
J. C. Clark.....	75	7 50
J. C. Ring.....	40	2 00

By order of Board of Trustees.  
I. C. PRAY, Sec'y.  
The above sale stands adjourned to Wednesday, December 9, 1883.  
I. C. PRAY, Sec'y.

Silver Butte Consolidated Silver Mining Company.—Notice is hereby given that on SATURDAY, December 12th, 1883, at 10 o'clock A. M., there will be sold at public auction, at the office of the Company, so many shares in the capital stock of the Silver Butte Consolidated Mining Company standing in the names of the following persons as may be necessary to pay all assessments now due by said parties, together with all expenses of advertising and sale, unless said assessments and charges are previously paid:

Names.	No. Certificate.	No. Shares.	Am't
Beckford, D. R.....	273	1	\$ 50
Branchamp, J. H.....	239, 10	20	10 00
Dore, B.....	279, 276	20	10 00
French, B. E.....	78	52	26 00
Johnson, B. R.....	72, 79	5	2 50
Johnson, G. H.....	6, 54, 56, 57	54	27 00
Keck, H.....	144, 145, 146, 153, 260, 261, 102, 193, 194, 195, 196, 197, 198, 199, 200.	125	62 50
Maynard, F. T.....	289	4	2 00
Nerriam, E. D.....	121, 122, 266	52	26 00
Mills, A.....	293, 294, 295	31	15 50
Manchester, A.....	105	6	3 00
Perceval, R.....	67, 92, 94, 97	5	2 50
Spaulding, G. S.....	316, 317, 318	3	1 50
Sprout, J. R.....	211	6	2 50
Wardell, J. J.....	72	30	15 00

A portion of the above stock has been sold and not transferred. By order of the Board of Trustees.  
M. G. ELMORE, Secretary.  
San Francisco, November 10th, 1883. nov6

Heyer Bros., 76 and 78 Federal Street, BOSTON.

HEYER & CO.,  
IMPORTERS OF  
AMERICAN AND EUROPEAN  
Fancy Goods, Toys & Musical Instruments; also,

SOAPS, PERFUMERY, HAIR AND TOOTH BRUSHES, Port Folios, Portmanteaus, Ladies' Bags, Photograph Albums, Cutlery, Willow and Parian Ware, Children's Carriages, &c., Our Stock of Violin, Guitar and other Strings is very large. Our Foreign Goods are selected by one of the firm, and the American by the Boston House (established 1824.) We have the Sole Agency for Hallet & Davis' Boston Pianos, Smith & Bros' Harmoniums, and Treat & Linsley's Melodeons. The Hallet & Davis Pianos are each supplied with their Patent Suspended Bridge, which is a decided improvement. It gives a full and clear vibration in the upper octaves, producing a quality of tone unequalled in firmness and purity. Our Melodeons and Harmoniums are of the best quality, and warranted to give satisfaction. Sm

MINING CARDS.

OWEN'S RIVER CANAL COMPANY.

Capital Stock ..... \$1,000,000.

10,000 Shares ..... \$100 per Share.

A Portion of this Stock is no offered to the public, and recommended as an investment. FULL PAID AND UNASSESSABLE Stock, also Assessable Stock, can be obtained of A. J. DOWNER & CO., the authorized Agents of the Company, 406 Montgomery street.

President.....R. S. WHIGHAM.  
Secretary.....W. FISK HITCHCOCK.  
Treasurer.....MONTGOMERY GOOLY.  
Superintendent.....WILLIAM FLEMING.  
Engineer.....J. E. CLAYTON.

TRUSTEES:  
R. S. WHIGHAM, formerly of Whigham's Mill, Nevada City.  
WILLIAM FLEMING.....of San Francisco.  
SPEER RIDDEL.....Buying Teller of Parrott & Co's.  
ISAAC SWAIN.....of A. J. Downer & Co.  
WILLIAM P. PRATT.....of Nash & Fogg.  
Office of Company 328 Montgomery street 25csp

JOHN ARMSTRONG. WM. P. WILDER.

ARMSTRONG & WILDER,  
VIRGINIA CITY, N. T.,  
SEARCHERS OF RECORDS  
for Mining Claims & Real Estate.

RELIABLE ABSTRACTS  
guaranteed at reasonable prices.  
LETTERS OF ENQUIRY  
promptly answered.

ALEXANDER STOTT,  
MINING SECRETARY,  
512 Sansome Street, San Francisco.

Secretary of—  
HORSE SHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

T. C. SANBORN & CO.,  
STOCK BROKERS,  
No. 630, MONTGOMERY STREET.

OPHIR SILVER MINING STOCK,  
GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

NEW MINING AGENCY.  
WE HAVE MADE ARRANGEMENTS WITH A SPECIAL Correspondent at Austin, Reese River, by which any information attainable with regard to any particular mine in that locality can be obtained, for the Private Benefit of Parties in this City or elsewhere. Our correspondent will visit any mine which may be designated and report upon the general characteristics and condition of the same, the amount of work which may have been done, etc. A reasonable fee will be required for such service. For further information apply at this Office.  
EWER & SMITH.

L. F. LELAND,  
STOCK BROKER,  
No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2 1/2 to 3 1/2, P. M.  
Member of the San Francisco Stock and Exchange Board  
je-29

AGENCY  
For the Purchase and Sale of  
MEXICAN MINING STOCKS  
At No. 411 Clay Street, San Francisco.  
OFFICE OF THE PENA AND LA MARONENA SILVER Mining Companies, San Antonio District, Lower California.  
All persons are invited to call and examine Ores from the above mines.  
je13 Wm. FAULKNER.

New Bedford Copper Company.  
THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of SHEATHING COPPER; BRAZIER'S COPPER; COPPER BOLTS; YELLOW SHEATHING METAL; COPPER AND COMPOSITION NAILS; Which they offer to the Trade at the lowest market rate, and on the most favorable terms.  
MORGAN, STONE & Co  
108 Front Street, San Francisco.  
je-29

BUSINESS CARDS.

A. C. MORSE,  
Mining and Real Estate Agent,  
Office—S. W. corner Pine and Silver sts., Aurora.  
H. HAVING MADE ARRANGEMENTS with Messrs S. MARTIN ESQ., one of the principal Stock Brokers of San Francisco, I am prepared to BUY and SELL every description of Mining Stocks in Esmeralda District

GOLDEN AGE G. & S. MINING CO.  
Austin, Reese River.  
OFFICE, 57 Government House.  
WM. POOLER, SECY.

Fire Hose! Fire Hose!! Fire Hose!!!  
J. P. D. WILKINS,  
The celebrated HARNESSE MAKER of Stockton, maker Fire Hose, from the best material, and WARRANTED at a trial of the Weber Steam Engine Co., No. 3 of the city of Stockton. This Hose is manufactured at his establishment, and known to stand a pressure of 125 pounds to the square inch; as certified by the Chief Engineer.

ALSO FOR SALE,  
All kinds of HARNESSE and SADDLERY, at the lowest cash prices. REPAIRING done promptly, one door west of the Main Street Stable. oct12

WANTED,  
GOLD QUARTZ SUITABLE FOR CUTTING JEWELRY,  
By FRONTHIER A. DEVIEROY,  
au31 437 Pine street, San Francisco.

THE EUROPEAN  
ORE REFINING  
COMPANY.  
Quartz Mill and Furnaces, Bryant Street  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF  
ORES AND MINERALS.  
In large or small quantities, for such Experienced Treatment by the  
LATEST EUROPEAN METHODS,  
As may be ascertained by  
CAREFUL ANALYSIS,

At their works, to be the most Effectual in obtaining reliable results, and afterwards converting whatever precious Metals they may contain, into marketable Ingots.  
The South Park, and Folsom and Kearny street Car pass Bryant street. au31

The Pacific Mineral Company  
MAKE LIBERAL ADVANCES UPON THE ORES OF COPPER, SILVER, TIN, NICKEL, COBALT, ZINC LEAD, AND SULPHURETS CONTAINING GOLD. Due account taken of all valuable metals combining with Silver and Copper Ores, and advances made there for.

Parties owning undeveloped mines and desiring capital to prospect the same will receive assistance, if, upon examination, such leads are deemed sufficiently valuable to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-1f Montgomery Street, S. Francisco.

MARTIN & Co.,  
OFFICE—224 Montgomery Street, Up Stairs,  
WILL CONTRACT FOR THE  
Purchase of Copper Ores  
Assaying 8 per cent and upwards of Copper to the Ton. We will make ADVANCES upon Ores of COPPER, TIN and NICKEL. Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.  
HENRY MARTIN, J. F. GREENMAN,  
New York. San Francisco.  
San Francisco Post Office, Box 1259.  
je 1.

NORTH BEACH QUARTZ MILL  
and  
REDUCTION WORKS  
Are prepared to work Gold and Silver ores, in large or small quantities. Working assays made of small lots, and all kinds of ores crushed at short notice. Our new and complete Machinery, will enable us to give results fully up to the merits of rock. WHEELER & THAYER, Proprietors,  
C. C. JONES, Amalgamator.  
San Francisco, Oct. 12, 1883.





A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VII. SAN FRANCISCO, MONDAY EVENING, DECEMBER 14. 1863. NO. 7.

**ENLARGEMENT AND IMPROVEMENT  
OF THE MINING AND SCIENTIFIC PRESS.**

SATURDAY, JANUARY 2. 1863.

The publishers are pleased to announce the enlargement of this journal on the 2d of January next, from eight to sixteen pages—double its present size.

**NOTICE.**

The publication of the MINING AND SCIENTIFIC PRESS will hereafter be conducted by the firm of DEWEY & CO.

C. W. M. SMITH,  
W. B. EWER,  
A. T. DEWEY.

San Francisco, Dec. 1st., 1863.

**TERMS OF SUBSCRIPTIONS.**

Upon enlarging our sheet, we have determined to adhere strictly to the advance payment for subscriptions, and shall make only a slight advance on old prices. Our rates, hereafter, will be as follows:—For one year, \$5; six months, \$3. By city carriers, 50 cents per month.

**To Advertisers.**

The circulation of the Press throughout all the Mining Districts of this State and Nevada Territory, renders it a desirable advertising medium for Mining Companies, Inventors, Patentees, Machinists, Manufacturers, Builders and Tradesmen. Terms reasonable and uniform.

Advertisements for the first issue of our enlarged series, should be handed in at an early day.

**Sacramento Agency.**

W. B. RICE, at the book-store, 146 J street, between 5th and 6th, is our Agent for Sacramento city.

**Our Address.**

Parties addressing this office should be particular to write the name "MINING AND SCIENTIFIC PRESS" in full, to avoid all liabilities of mistakes.

**OUR NEW ARRANGEMENTS.**

By special notice it will be observed we have associated with us in the publication of the PRESS, Mr. A. T. Dewey, of La Porte, Sierra county, who has been connected with the *Mountain Messenger*, as publisher, for the past five years. We shall now be enabled to carry out our long cherished plan of enlarging the paper, and the friends of mining and mechanical industry may rest assured of soon receiving a journal in every way worthy of their representation and universal support.

**A DESIRABLE IMPROVEMENT.**—"Crocker's Stock and Assessment Ledger" is claimed to save Secretaries of mining companies a great deal of labor, and is a real assistance in keeping the accounts of shareholders from becoming complicated. The publisher's description will be found in our advertising columns, and a copy of the work can be seen at the office of the Press.

**A RARE CABINET OF MINERALS.**—We were well repaid for a visit to Dr. Jos. M. Frey's office, at Sacramento, in a brief examination of his rich and rare collections of minerals, which, in variety, is doubtless unsurpassed in the State.

**RIVERSIDE.**—This is the name of a new "city" just laid out in Keys' Mining District, Owen's River, ninety miles south of Aurora, and fifty miles above Bend City. Mr. C. C. Scott informs us that the mines prospect richer than those of the Inyo District, and that they are surrounded by rich and healthy agricultural lands.

**PILOT KNOB.**—A correspondent writing from "Pilot Knob" says that the Pilot Knob shaft is now down fifty feet, with high hopes of success at a depth of 100 or 150 feet. Our correspondent adds:—

"Too many around here get faint-hearted if they do not find copper near the surface. We prefer depth with continuation, to surface with pinching out and in. Many shafts are idle, awaiting the periodical excitement for more work. There is a fine development of two feet of rich ore in Johnston & Co's shaft, near the Aroyo Seco. They are persevering, energetic men, and deserve success. The Lima also is taking out ore; vein, I believe, 12 inches. Excitement has ruled high for a time, but sober business has now taken its place.

**REPORTED SILVER DISCOVERY.**—A correspondent writes from Mokelumne Hill, Dec. 5th, 1863, as follows:—I have just returned from the Stanislaus River, and vicinity of Melones, where I think another rich strike has just been made by a company of Greeks. While prospecting for copper they struck a vein, about four feet wide, yielding sulphurets of copper and green and blue carbonates of copper, in which there is a large proportion of silver. A piece of choice rock taken from a depth of two feet, produced at the rate of \$414 per ton, while an average lot produced \$302 per ton. This assay was made by our friend Dr. James Hepburn, of this place, and was made for silver only. In a few days I may give you a description of the place, and its ledges, for publication. The first chance I have I will send you a piece of this Greek rock for your cabinet. R. W. D.

**THE REESE RIVER QUARTZ MILLS.**—Correspondence, dated Austin, 28th of November, in the *Virginia City Union* says: There are three mills here in this cañon, and three more are being built; but they are pretty generally idle now, on account of the mill men and miners being at sword's points about the price of the crushing—\$100 per ton. The miners also say that the mills are not prepared to give proper return's as they have not a sufficient number of pans. Whatever may be the merits of the controversy, the disagreement exists, and its consequences have been injurious to the country, much retarding its development.

Much excitement exists in and about Salt Lake, owing to new discoveries of good deposits of the precious metals. Gold and silver bearing quartz has been found in several localities. The Mormons, or at least the head men of Brigham's tribe, are in nowise pleased at the "strikes" being made. Yet prospecting continues daily, whether they like it or not. The "Saints" fear a rush next spring of hardy miners.

The annual freight bill of the Central mill in Virginia city is, we are informed, about \$20,000. This is for salt, chemicals and such machinery and other things as the legitimate wear and tear of a mill make necessary.

The *Humboldt Register* says, something like two miles above Star City is found a limestone bluff, having a bold, square front, like the facing of a huge fort. In the face of this is the entrance to one of the grandest caverns ever yet explored. It has been partially explored.

**FOUR MASTED SCHOONER.**—An eccentric looking craft of this description is now freighting on the Sacramento river.

**SANTA CRUZ PETROLEUM.**—The Santa Cruz Petroleum Oil Works Company have worked wonders in the last two weeks. A road has been constructed to the Petroleum Hills, one building, designed as quarters for workmen is already finished; another, two stories high, and of larger dimensions, is almost completed. The brick, for boiler and engine, and for retort and still foundations, are already on the ground. If the rains do not very much interfere with the work, we shall illuminate Santa Cruz with oil from our own hills before spring.

The supply of petroleum and rock oil is giving out in the East. Many of the refineries in Pennsylvania and Canada have stopped work for want of the raw material to work upon. Crude Oil has advanced in price from \$1.50 to \$5 per barrel.

There seems, in many places, to be a sudden exhaustion of the great reservoirs of oil; sometimes however the springs are intermittent, and resume their flow after a short cessation.

The Santa Cruz Petroleum Oil Works Company will not be annoyed by any intermission or exhaustion of their supply of raw material. The petroleum is all above ground, and in quantity sufficient to last a century. If by boring they should reach a reservoir of oil, that would be clear gain.—*Santa Cruz Sentinel*.

**MINERS IN DEMAND IN SISKIYOU COUNTY.**—The *Yuba Journal* says that Siskiyou county is deficient in a supply of Mining hands, caused by the stampede to now places, and the dread of China competition. Miner's wages have increased twenty-five per cent., and mechanics' wages have also increased.

**THE RECENT ELECTION** in the Washoe Stock Exchange Board at Virginia resulted in the choice of R. M. Daggett, for President. R. W. Billett for Vice President. John McCarty for Secretary, and R. T. Smith for Treasurer, all of whom were elected by acclamation there being no opposing candidates.

**THE COMMERCE OF THE WORLD.**—It is stated that the commerce of the world requires 3,600,000 able-bodied men to be constantly traversing the sea. The amount of property annually moved on the water is from fifteen hundred to two thousand millions of dollars; and the amount lost by the casualties of the sea, averages twenty-five millions of dollars.

**CHICAGO WOOD PAVEMENTS.**—The Board of Works in the City of Chicago have given the preference to wood pavements over those of stone, as being the most durable of any kind yet used there. The following is a description of the method of construction: Lay down flooring of one inch board on a bed of sand; coat the floor with asphaltum; stand on end blocks of wood six inches high, by three inches thick, and nine inches in length, in rows about one inch apart, divided by strips of boards. Fill in these open narrow spaces with asphaltum. There are six miles of these pavements in Chicago, which after six years constant wear, are found to be nearly as perfect as when laid down.



[From our Traveling Correspondent.]  
COPPEROPOLIS.

MR. EDITOR:—In collecting information as I travel from mine to mine, I have noted down several matters, which I suppose, may be called abuses, because they are unjust to miners. These, I hold, your paper should recognize, and correct, or at least in justice to itself, endeavor to correct. One thing in particular, I find very injurious to the mines, and all classes with whom I have conversed upon it are anxious I should bring it forward.

Throughout this copper country, there are many claims having a local value from five to twenty-five dollars per foot. These prices, outside stockholders, men of business, and shareholders laboring on claims they own in, are content to pay, and do pay all the time. In fact, quite an amount of stock, after this fashion, is constantly changing hands.—At the same time *not one* of these claims could sell a foot at San Francisco for *as many cents*. Now this it seems to me is wrong, wrong in itself, wrong especially to the laboring miner. If men living in the neighborhood of a claim, or working a claim, are content to give ten dollars a foot, because they know it is worth the money, being a marketable article, it ought surely to be worth the same on Montgomery street. If the brokers choose to make San Francisco the centre of the mining market, they must at the same time assume the entire responsibility, and not dictate what shall, and what shall not, as their sovereign pleasure wills, be offered for sale to the public. If the country must be governed by San Francisco, in return, San Francisco should be just to the country. The present system is a curse rather than benefit to the mining interest.

Let me state a case in point. A company with limited means go down on their claim say seventy feet, and strike a vein which makes the stock worth ten dollars per foot in its neighborhood. They then require further means to prosecute their work, pay their bills and so forth. Money happens to be scarce in the country; San Francisco is closed against them, and so, much to their injury, work is suspended. Now, in such times of need, the centre of the Stock-market, if there is one, is precisely the place to go, being formed for that purpose, at least one would think so, but they may as well go to Jericho as there, for the market is not open to them. You may sell any other property when, how, or to whom you please, but your mining stocks you must get permission to sell. Such is the condition of many mines here, as you find by my reports—"work is suspended." Now, I cannot see that a change of system, by which means could be obtained to prosecute work, by a ready sale or hypothecation of reliable stock, necessarily opens the door to wild-cat stock. The "cooking" system is not practised here because simply the mines are good. All I contend for is that if a claim has a local value of ten dollars a foot, it ought for the same reason, and from the same cause, because it is worth ten dollars, to have the same value in San Francisco. For instance, the other night, a half-share in the Massachusetts sold here for \$1120. How much for the same could they get in San Francisco? Not a dollar, good as it is. I hope Sanborn, Berry, and other leading men will think this matter over. They may rest assured a change in this respect would be of immense benefit to the mining interest in the country, bring a safe and profitable business to the Bay, and put money in their own pockets. I think the brokers as regards this matter really are pursuing a suicidal policy. They have a world-wide reputation for generosity—ever free, open-handed, just. Were they a sordid, sharp, crafty, money-loving class, I should appeal to their cupidity. Those who sit on the miners' throne, should give some little heed to the miners' rights and wants.

The last mine I mentioned in continuing my report was the Colnor, some ten miles east of north from Copperopolis, near Altaville. We must now come back to Salt Spring Valley, and begin with the

#### KENTUCKY.

This claim contains 3,500 feet, divided into thirty shares. Main shaft eighty-five feet, with two drifts. The first drift, eighteen feet down the shaft, I did not see, but I am told it held good copper. A small vein was cut below, also, 75 feet deep, more west than they are now drifting, and to cut it again in a more easterly course is the object of the present work. This claim has had a good local value. The shaft, is sunk in serpentine rock, which in my opinion is not favorable. The Union lode, however, must run through the Ken-

tucky, so if they do not find it in this shaft they can in another. I was in hopes of getting some handsome specimens of asbestos here, but those left were poor. I send you two, one of each kind. The peculiarity of this rock consists in its being impervious to fire, and capable of being woven into cloth. It has long been used by the London Firemen, in cases of extreme need; and is, I suspect the great secret of the Fire-king of Frisco. I suppose the people have wearied of seeing him by this time and worship some other "curious thing," so I shall not injure his business by disclosing his secret. Continuing on some three miles we reach the

#### COMET.

This claim contains 3,750 feet, divided into 25 shares. Main shaft fifty feet, showing a well defined lead two feet thick, with walls about eight feet apart. Work suspended to put up machinery. The Comet is certainly on the Union lode, and will soon have a high value. A short distance from, parallel with the Comet is the

#### FRANKLIN.

It contains 4,500 feet, divided into thirty shares. Main shaft, 20 feet; nothing going on here at present. Indications good. Near the Franklin and parallel with it, is the

#### PLEASANT VALLEY.

It also contains 4,500 feet, divided into thirty shares. Shaft, thirty-seven feet, showing a small vein well developed. Work suspended until next Spring. About one-quarter of a mile east of these claims, at the foot of the hills, and parallel with them is the

#### BUFFALO.

This claim has also 4,500 feet, divided into thirty shares. Main shaft, sixty feet, with one drift twenty-five. Rock much torn and bolted by a slide. A small vein found. These claims show very plainly the four veins of the Copperopolis system. Next, up the valley three miles more, is the

#### SUFFOLK.

With 4,200 feet, incorporated. Main shaft, thirty-five feet. This claim excited great expectations at one time; but the rock now looks so contrary that I do not like to venture a prediction. There is much work to be done here. Nevertheless, indications of a vein exist. A mile further on comes the

#### CALEDONIA.

This claim contains 3,000 feet, divided into 3,000 shares. Main shaft, 105 feet. The Caledonia will shortly be one of the principal mines of the valley. The vein opens well at the top, and goes down regularly increasing to the bottom where it is twenty-two feet thick. The veins at the present consists entirely of mundic, and may change any day to copper. A change in the rock is very perceptible now. If they do not have a big thing here, I know not where they will find it. An excellent engine from Coffey & Risdon of the Bay, has just been put up, making the works very complete. Mr. Brown and Capt. Frost showed me every attention. Proceeding still some miles, to the north of Stockton and San Andreas road I finish the mines on the Copperopolis lodes, and leaving the Salt Spring Valley, come into the Spring Valley District. First here, is the

#### JEFFERSON.

It contains 2,800 feet, divided into fourteen shares. No work going on at present, the owner paying so much to the Forty-nine, as one shaft will develop both claims. A very good and prudent arrangement.

#### THE FORTY-NINE.

It contains 3,000 feet, divided into 3,000 shares. Main shaft, fifty feet. This mine is eventually going to stand high. When down 100 feet, the rock will lose what little corruption it bears at present, and show a strong vein. It contains good yellow sulphurets now. On the east of these claims a few yards is the

#### LIBERTY.

It contains 2,800 feet, divided into fourteen shares, with two shafts, fifty and forty feet respectively. In the former, the indications are good; the rock carrying strong sulphurets. In the latter the vein dipped out with such an inclination that a third shaft will be required. Again, west of these, between three and four hundred feet, but parallel with it, is the

#### POCAHONTAS.

It contains 2,800 feet, divided into fourteen shares. Main shaft, fifty feet; which has been put down principally by one man working alone, Mr. Gaffneff, formerly a liquor dealer in San Francisco, and a large loser by the Cariboo excitement.

It is the most striking and creditable instance of individual pluck that I know of. I thought at one time that it was all lost labor, but a closer examination shows me I was wrong, and that the old gentleman has a right good chance. He drills and blasts alone, timbers alone, hoists alone. If he does not deserve a good reward, who does?

I staid all night at the Briant House, kept by a gentleman of that name, and which is certainly one of the best road-side hotels I know of in California. The next morning Mr. McKeon accompanied me round. He is largely interested in copper, and has made himself well acquainted with the Copperopolis veins. We visited first the

#### CONSTITUTION.

This claim contains 2,800 feet, divided into fourteen shares. Work just commenced with excellent croppings and openings. It is two miles east of the line of the Union, and appears to a swer to the course of the Crockett. Something over 100 yards east from this is the

#### SPRING VALLEY CO.

This claim has 5,000 feet, divided into 250 shares. Main shaft fifty feet, with vein well developed. One hundred feet ought certainly to give good copper. Next is the

#### BUENA VISTA.

I find I omitted the dimensions of this claim. It is a continuation of the Constitution though two miles from it. The indications and croppings here are really magnificent. The Buena Vista is located on a very high hill on the south side of the Calaveras, giving a glorious view of the whole country. Recrossing the river, and going west of north some two miles we found the

#### SAM BOOKER.

This claim is named after Gen. Booker of Stockton. It contains 2,800 feet, divided into fourteen shares. Main shaft 107 feet deep. The vein opens well, I understand, at the bottom. The rock carries abundance of mundic, and looks well. Work suspended until next Spring. My own opinion is this will be a good claim. From here we rode quite a distance to Mr. Pattee's hotel, where we were very politely received, and proceed to the

#### JACKSON.

This claim contains 4,600 feet in 200 shares. Main shaft forty feet deep. The vein well developed at the bottom. The rock is pure, carrying mundic and yellow sulphurets. Depth only is required here to have an excellent mine. I have to apologize for not visiting the "Sylvester," another claim near the Jackson, as I promised to do so the next morning. I beg to state I could not find it. I proceeded then to Mr. Coles of the North American House, another excellent hotel, eight miles lower on the Stockton road, where I met friend Weihe of Stockton who was up on a shooting trip. I was happy to hear from him that the Stocktonians are well pleased with our efforts. After dinner we all drove out together to see the

#### YOUNG AMERICA.

This claim contains 6,600 feet in thirty-three shares. Main shaft 140 feet, showing a good opening, and a strong vein all the way down. The work is well done, though the shaft is a little too small. The rock at the bottom in spots is peculiar, being soft as if slacked by lime. It carries an immense body of mundic, with large thick veins of yellow sulphurets through it. I told Mr. Cole they might strike the vein at any hour, and at Jenny Lind two days after I understood they had done so, and to use a common mining expression "struck it good." If they have not they soon will. This claim is on the Gopher system, and before long will stand high.

Here closes the Salt Spring Valley and Spring Valley mines. Taken altogether they look very well. I have now only the Jenny Lind and a few others on the road back to Copperopolis to report upon, which I will "write up" without delay.

L. H.

GEOLOGICAL SURVEY OF GREAT BRITAIN.—The Geological Survey made considerable progress during the last year; two thousand four hundred and thirty square miles were surveyed in Great Britain; the publication of the maps proceeded, and memoirs were issued illustrating the geology of the Isle of Wight and the country around Bolton-le-Moors. In Ireland the new ground examined amounted to about one thousand and twenty-eight square miles; four new numbers explanatory of the maps were issued. The surveyors were also engaged on the re-examination of the districts of igneous rocks running from Wicklow into Waterford.—*London Mining and Smelting Magazine for October.*



**THE AQUILA.**—If the New York Board of Underwriters are wise they will close with the proposition of responsible parties in this city, who have offered to undertake the raising of the *Aquila* for \$150,000 in gold. This party offers to save the *Aquila*, if it is practicable, and to guarantee the safe raising of the *Comanche* under any circumstances. If necessary, they bind themselves to build a coffer dam entirely around the wreck, and pump it out within a given time. The answer of the Underwriters is not yet received.

That the cargo of the *Aquila* can be saved beyond a peradventure, is a matter that can scarcely admit of a doubt. The ship lies directly alongside of a substantial wharf, with her stern some ten feet out of water, and her bow thirty feet under water. It is a matter of the utmost astonishment that a party of wreckers, with suitable diving apparatus, has not long since been set to work to take out the cargo of this ship, by taking off her decks and raising the cargo piece by piece. If danger from storms is apprehended, there are various ways that she may be rendered perfectly secure in her present situation.

The trouble seems to be that nobody appears to own her—she being held by these parties in interest—the Government, the Underwriters and the Contractors—each disclaiming any positive controlling ownership, and each asserting that she is in the hands of the other. The contractors have evidently made a losing speculation, and have apparently nothing to gain by moving any further in the matter. The Government has advanced \$340,000 on the *Comanche*, which amount is fully covered by insurance, and therefore has nothing to lose pecuniarily, as the matter now stands. The amount of insurance affected by the contractors, does not appear, but at all events the underwriters do not seem disposed to accept an abandonment. Thus it appears that the city of San Francisco, with all her valuable commercial interests, are to be kept in jeopardy for an indefinite time, while these several parties are endeavoring to settle their dispute with regard to title. It is earnestly to be hoped that the Government, if neither of the other parties can agree in the matter, will step in, and in some manner close a contract with the San Francisco company above alluded to, so that this much needed security to our harbor and coast may be raised, set up and made ready for duty at the earliest possible moment. This work cannot now be done much inside of a year at best. Had this unfortunate accident not occurred, from five to six months only would have been required to have put the *Comanche* afloat.

## DR. DE CASTRO, Oculist and Aurist,

**WHO HAS PRACTISED IN NEW YORK** and all the principal cities of Europe with such unrivalled success, and from each place is in possession of the most eminent testimonials, may now be consulted upon diseases of these delicate organs, with a view to their permanent cure. Deafness of long standing thoroughly cured. The Doctor employs his (by the Medical Society of London approved)

**self-adjusting Artificial Tympanum** For the relief of deafness, attended by loss or injury of the membrana tympani, and for the cure or discharge from the ear—the invention of Dr. Castro, M.D., author of "Deafness Practically Illustrated as to its Nature and Treatment," etc.

The self-adjusting Artificial Tympanum was first introduced to the notice of the profession at the meeting of the Medical Society of London, on the 20th of November, 1863. An animated discussion ensued on the reading of the paper, and several members of the Society bore testimony to the success of the remedy and the importance of the original discovery.

Mr. Baker Brown (member) bore testimony to the Self-Adjusting Artificial Tympanum, as he had observed the famous Countess de Montebello, who had received from it. She was in fact, quite deaf, and in a most miserable state; the effect of the tympanum was instantaneous—quite like a miracle. Five more testimonials from Members of the Medical College, New York, and the principal cities of Europe.

Operating Rooms, UNION BLOCK, corner of Market and Kearny streets. Entrance on Market street.

## THE BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

### ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

### METHOD OF CRUSHING ORE.

The BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

### EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

### EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

### BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which the mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1860, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery, weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed being cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

MANUFACTURED ONLY BY  
**GODDARD & CO.,**

At the Pacific Iron Works.

SAN FRANCISCO.

nos 125 to 136 First street, and 136 to 144

Front street.

**I. C. E. KLEPZIG & CO.,**  
**GUN MAKERS,**  
...AND...  
DEALERS IN GUN MATERIALS,  
733 Washington Street, San Francisco,  
[One Door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Ekland. Je21

**LEANDER RANSOM,**  
**Civil Engineer**  
AND  
**SURVEYOR,**

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

### ALSO

**STATE LOCATING AGENT.**

And as such having the sale of

**600,000 ACRES OF STATE SCHOOL LANDS,**

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE, 328 Montgomery streets. oc7-3

**D. NORCROSS,**  
Masonic Temple, No. 6, Post Street.

**Military Goods of all Descriptions.**  
Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.

WM. H. MEAD, THEODORE VAN TASSELL.

**MEAD & VAN TASSELL,**  
**HATTERS,**  
Montgomery st., cor. of Commercial,  
SAN FRANCISCO.

TO OUR FRIENDS AND THE PUBLIC GENERALLY.  
Having Purchased the entire interest of Messrs FISHER & Co., in this city, we shall, on the 1st day of May assume the management of the

### HAT EMPORIUM,

now being conducted by that firm.

Mr. WILLIAM H. MEAD, for the last seven years Salesman with Messrs Fisher & Co., respectfully solicits a continuance of the patronage so long and liberally bestowed upon the old House, feeling entire confidence in our ability to suit in every particular.

Mr. THEODORE VAN TASSELL, for eight years with Messrs Le Gay & Co., would be pleased to see his friends at his new place of business.

The long practical experience of Messrs Mead & Van Tassel in the Trade justifies them in saying that their work cannot be excelled either in finish or durability. Having perfected arrangements, we shall be in constant receipt, by every steamer of soft goods of the very finest

**French and American Manufacture.**

Our Stock now on hand is superb.

Call and examine, and judge of the merits of our claim to the title of "LEADERS OF FASHION."

Respectfully,  
**MEAD & VAN TASSELL,**  
Montgomery street, cor. Commercial.  
nov2

**RIEHN, HEMME & CO.,**  
**ASSAYERS.**  
Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.

**Assays Made of ores, Minerals and Metals.**

REFERRED WITH PERMISSION TO  
Messrs. F. PARROT & CO., | Messrs. ALBION & CO.,  
R. B. SWAIN, Esq., | DONOHUE, RALSTON & CO.  
Chas. F. RIEHN, late U. S. Branch Mint, gives Lessons in Assaying, also in Mineralogy and Chemistry as far as required to become a practical Assayer.

**G. E. MOORE,**  
**Assayer and Analytical Chemist,**  
No. 612 Sacramento Street,  
HAVING ESTABLISHED A CHEMICAL LABORATORY, furnished with every requisite for delicate Analytical work, is prepared to execute the Assay and Analysis of Ores, Mineral Waters, Guanos, etc., with accuracy and dispatch.

REFERENCES:  
Prof. J. D. Whitney, State Geologist, San Francisco  
Albion & Co., San Francisco.  
Sulzer & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento.  
sep14

## PEOPLE'S OPPOSITION Steamship Line!

Special Notice.—The Steamers of this Line have been withdrawn from the Nicaragua Route until further notice.

### GREAT REDUCTION IN RATES !!

The Fast and Favorite Double Engine Steamship,  
**MOSES TAYLOR,**  
J. H. BLETHEN.....COMMANDER  
Will be dispatch for PANAMA  
From Mission street Wharf.  
**WEDNESDAY, - DECEMBER 23, 1863.**  
Punctually at 9 o'clock, A. M., on  
Connecting at Aspinwall, by the Panama Railroad, with the Splendid Steamship  
**ILLINOIS**.....2500 Tons.

The Moses Taylor, since her last trip has undergone the most extensive repairs. Her decks have been extended forward and aft; cabins enlarged, refitted and repainted throughout—making her accommodations equal to any Steamer on the ocean.

For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

## BOOK KEEPING, Penmanship

AND  
**COMMERCIAL CALCULATIONS,**  
Taught by J. S. LUTY  
**PRACTICAL ACCOUNTANT,**  
305 Montgomery Street, Corner of Pine.

### TO QUARTZ MINERS.

All persons interested in Mining Machinery are invited to call at Donahue's Foundry and examine my improved Amalgamator. It is unquestionably superior to anything now known for amalgamating Silver and Gold. It works 1000 pounds at a time, and will amalgamate over three tons a day. By the motion of the revolving muller, the pulp is drawn through its centre and passes under it, between the grinding surfaces, to the circumference; from whence it passes again over the muller to the centre, through the holes and between the grinding surface to the circumference as before. Thus a constant circulation of the pulp is kept up, bringing the particles of ore again and again under the muller, and reducing the whole mass to an impalpable powder.

No quicksilver lies between the surfaces to be ground, but at the circumference and centre of the pan where the metal must pass through it as the pulp circulates. A patent was granted for this Amalgamator in December last, and all persons are again warned against purchasing machines made at the Miners' Foundry called "Winchler's Amalgamator," as they are an infringement on my patent, and a suit is now pending in the U. S. Circuit Court against the parties infringing. My Amalgamators can be seen running at Donahue's Foundry, where all can judge of their operation and the very superior style in which they are being manufactured.  
sep21

THOMAS VARNEY.

## PATRONIZE HOME MANUFACTURES!!!

**James Longshore,**

**Trunk and Valise Manufacturer,**  
307 Sansome Street, under Tehama House. Trunks and Valises, Wholesale and Retail, Fine Seal Leather Trunks, Valises, and a fine assortment of LADIES' TRUNKS constantly on hand. Trunks covered and repaired.  
aug x

### APARTMENTS.

FURNISHED APARTMENTS, WITH OR WITHOUT Board, at 1018 Powell Street, between Clay and Washington Street. Persons desirous of a respectable home will do well to apply.  
jy6

### FOR SALE.

**PATENT PRESSED RUSSIA IRON MINING PANS,**

Russian Iron Quartz Screens for Mills;  
Portable Forges; Cauldron Kettles;  
Pumps, both Frame and Lift;  
Lead Pipe; Rubber Hose;  
Wrought Iron Pipe;  
Bibb Cocks; Couplings; Play Pipe  
Cooking Stoves and Heat Stoves  
Tin Plate; Sheet Iron; Sheet Copper;  
Fruit Cans of Various Kinds;  
Lard and Butter Cans of all Sizes;  
Iron Wire; Brass Wire; Copper Wire;  
Copper Rivets and Burrs; Iron Rivets; Etc.

We are also manufacturers of the

**UNEQUALLED  
MONITOR COOKING STOVE  
Or RANGE,**  
FOR HOTELS.

To which we call particular attention.

je-29

TAY, BROOKS & BACKUS.



## REESE RIVER CORRESPONDENCE.

AUSTIN, December, 1863.

EDITOR MINING PRESS:—Since writing my last communication, I have stood a "Looker on in Venice," waiting for events to settle down into some tangible shape, whereby I might give your readers the true status of things, as received on the ground. The condition of the mills here is not entirely satisfactory, as but one in the canon, has been in operation during the past week, the rest are being housed or inclosed as fast as possible. I may make an exception in the case of one, which seems laid by entirely for the winter, with only a temporary shed over the boilers and machinery.

## AMADOR DISTRICT.

The chief attraction, the centre of all, as I may say, is turned to the Amador District, at the foot of the Eastern range of hills, skirting the valley of the Reese River, several miles north of Clifton. This is not a distinct district, but called so to designate its locality. About six weeks ago, the Amador ledge was discovered and as the work on it progressed, revelations of great promise were developed until the whole population became wild with excitement, and now, I doubt if there is a miner or an individual who could get away, who has not been over there with his pick and shovel prospecting. A town has already been laid out, called Coral City, and buildings are being put up as fast as lumber can be had.

In the canon, this side, I was told to day, machinery for a five-stamp mill, had arrived on the ground, and would be in operation as soon as it would be possible to put it up. While there is plenty of water, it is to be regretted that there is a deficiency of wood in and around that locality. The nearest considerable woodland, is eight miles up the same range of hills, or in sight across the valley of the Reese river, twelve or thirteen miles distant, in what is called Ravenswood district.

## THE AMADOR MINE

Is located on a gentle incline, facing the West. The ledge has been opened twelve feet below the surface, exposing a finer quality of quartz than in other districts, full six feet wide, tinted throughout with the blue sulphate of copper, and holding somewhat plainly, bi-sulphuret of iron, with some show of horn silver and bromides. I have yet to see the first man to speak unfavorably of it. This, together with my own information, induces me to pronounce it a first class mine.

## OTHER MINES.

Every claim taken up, in that district from which I have seen specimens, seems to be of the same classification of rock peculiar to this district. The Gen. Banks, another mine located on the same incline, two hundred feet below the Amador, running parallel and directly in front, is highly spoken of, and is said to be equal, if not superior to the Amador both in quantity and magnitude. From personal observation, I cannot speak of its vastness, as it was not stripped when I was on the ground, though I can pronounce it to all appearance nearly the same in richness.

Other mines have been taken up; indeed, the whole mountain has been run over, and wherever any indications were exhibited they were taken up at once, and, from appearances, with promise of a rich reward.

Unfortunately for mines outside of the charmed circle, they do not seem to provoke any inquiry, probably not that they are worth less, but the new mines, more.

## DESPERADOES ABOUT.

We are having a rehearsal of the times of your city before the days of the vigilance committee, wherein life has no security or protection, and it is seriously contemplated to adopt the same course of procedure, to rid ourselves of a class of murderers who regard human life as a plaything for their bravadoism and courageous (?) exploits. It was but a day or two since that two men were shot dead and the third mortally stabbed.

## CONFIDENCE IN THE MINES GENERALLY.

With all the drawbacks we have with the mills, I do not see that the confidence in the hidden wealth of this section, is the least abated. With the best mines, I do not see any lack of progress in their development. This surely indicates no discouragement and should prove the full faith in the integrity of the mines, by capitalists and others, most interested in their development, and ultimate success. It is probably

true, that many claims have been taken up and forced upon the market by sharpers, whose specific object was to fill their pockets, and then let the burthen fall upon their dupes; also that many with honest intentions, have embarked in the same enterprise and found they had mines not worth the powder to blow them up.

## HEEDLESS INVESTMENTS.

I have often wondered how a business man, who would not purchase a peck of beans without first examining them, or pass over money without balancing the equivalent well and long; is so ready to accept any man's "ipse dixit" when it applies to mines, and pay over thousands at the sight of rock studded with metallic globules, containing but a small percentage of silver. Take any other species of property, and the voucher of a saint will not answer his purpose. He must see for himself, and study the probabilities of a return from his investment. Let him apply this attention in his choice of mines and he will have less regrets to burden his soul, and more money in his coffers. If a man wishes to invest in mining speculation, and his attention is called to any particular locality, he has ample means to know what he propose to purchase, even though he cannot visit the mine himself. Thro' agencies established in almost every district, a pretty fair conclusion can be formed, corroboratory, at least, as it should be, of the representations upon which he originally proposed to purchase.

## SACRAMENTO.

The persistent and indomitable energy characteristic of Californians is strikingly illustrated by the recent accomplishments of our Sacramento neighbors. Doubtful if there is upon record the example of any community that have been so repeatedly impoverished by misfortune who have so promptly rebounded and risen to prosperity. Eighteen months ago one could see no encouragement or but little hope for the city to sustain her greatness, but now her darkest days seem passed, and with newly graded, gravelled and planked streets, mammoth levee, State Capitol and Pacific Railroad, she appears again upon the broad track of prosperity. The foundries, machine shops, and various manufactories have been enjoying an unusually flourishing season.

## THE LEGISLATURE

Organized in both branches promptly and harmoniously on Monday, the first day of the session. Tuesday the Senate met the Assembly in joint convention and canvassed the vote of the State Election. The vote for Governor sums up 108,905, Mr. F. F. Low receiving 64,283 and J. G. Downey 44,622. Mr. Machin, for Lieut. Governor, received a majority of 20,950 over McKinstry.

The Inauguration of Governor and Lieutenant Governor took place at noon, on Thursday, in the Assembly Chamber, after which Mr. Low delivered a very sensible address, in a plain, pleasing manner. A substantial military display was one of the features of the day, and a splendid ball was held at Agricultural Hall in the evening.

## SOBER INTELLIGENCE.

In appearance our State officials show an improvement in favor of sobriety and intelligence, and cold water will doubtless preponderate in Sacramento this winter, without the aid of floods. The Legislature have exhibited an appreciation of useful knowledge by giving the MINING AND SCIENTIFIC PRESS a liberal subscription list in both Houses.

## THE LOBBY.

The "Third House," of which (as a brief member) we must speak modestly, has sadly degenerated in numbers but highly increased in respectability.

## THE LEGAL TENDER ISSUE.

The question of the repeal of the Sanderson contract bill of last session, is likely to become a prominent one, and from the sentiments we heard expressed by various members, we think the chances are in favor of its nullification. The grounds assumed by those in favor of legal tender circulation is that thousands of dollars are now coined by importers and wholesale dealers through the premium on gold, and consequently consumers are holding on to the short end of the stick; and further, that the bill is an indirect discountenance of the Government's treasury notes as legal tenders, not particularly complimentary to the patriotic reputation of Californians. The matter will certainly be ably canvassed.

REESE RIVER ITEMS.—The following paragraphs are from the *Reveille* of Dec. 3d:

ANOTHER MILL.—The machinery for another quartz mill, to be run by water, owned by Hon. T. G. Phelps, has been deposited on the site selected for it, at the lower end of Lander City, on Big Creek. We like to see these evidences of the faith of mill men in the richness and permanency of our mines.

TIERNAN & Co's mill, Lander City, will be ready to run shortly. The batteries have not arrived as yet, on account of some delay on the road, but a large arrasta has been built, and the pans put in order, which will be used for crushing and amalgamating until the batteries can be placed upon the ground. A large quantity of Great Eastern rock is at the mill, ready for crushing.

THE AMADOR.—Near fifty men are daily employed on this ledge, stripping it, running a tunnel, etc. If this energy is continued during the winter, the Amador will, by spring, be in a very advanced stage of development, and an immense amount of rock will be ready for crushing. We are pleased to see such enterprise. If all our mines could or would exhibit such, it would require only a few mouths to develop to the satisfaction of all, the vast riches of this region.

FROM HUMBOLDT.—Charley Barber, from Sierra District, has shown us a very pretty silver brick taken from ten lbs. of rock from the Eclipse Series. He gives encouraging accounts of the progress of mining development in Humboldt. He feels fully confident that that region will be shipping large quantities of bullion inside of two years.

OWEN'S RIVER.—A gentleman writing from Owen's River to the *Aurora Times*, says: "that country will no doubt prove to be as rich in gold and silver as any yet discovered. The Slate, Russ, White Mountain, Inyo, Coso, and Slab Range, are all rich as far as prospected. The San Carlos Company are pushing their work ahead, and will soon have their mill ready to commence crushing rock. Bend City is getting to be quite a large place; also, San Carlos. There are families coming in every day, and settling up the vacant land. There is plenty of as good land here as I ever saw in any country, and I think this will, in a year or two be one of the finest places on the Pacific Coast."

## MINING SHARE MARKET.

The Mining Share Market, for the past week, has been characterized with extreme dulness, and quotations, as a general thing, have fallen off. Chollar, Sierra Nevada, Daney, Grass Valley and Wide West have each met with slight improvement; while the Ophir, Gould & Curry, Burning Mountain, North America, Lady Bryan, El Dorado, Chihuahua and Western Summit, Utah, Sheba, Melones, Justice and several other minor stocks have fallen off from last quotations. An unusual amount of assessments, recently levied upon several prominent mines, has contributed in part to this depreciation. The ardor of speculators has become very much dampened of late, while outside buyers are much more wary than formerly and much less inclined to invest at any price.

Gould & Curry has been more in favor during the past week, with very little offering. Offers of \$4,450 have been freely made, without finding sellers, although we notice a single transaction at that figure. This is \$50 less than last week's figures. Dividends for the month have been freely sold at \$140. Remittances of bullion from this mine for the week, have exceeded any previous similar period.

Ophir shares have been dealt in to a less extent than for several weeks previous, and at prices generally about \$25 less than last quotations. Notwithstanding the increased dividend, (\$60 per foot) declared last Monday, dividends for the current month have been sold at from \$40 @ \$45.

Uncle Sam is considerably sought after at about last quotations. It has changed hands during the week at from \$430 @ \$440. But few transactions are reported, holders being generally firm. Accounts from this mine are highly encouraging. The company has a large amount of very fine ore already out, and are constantly raising more. They have an 80-horse engine just arrived upon their grounds and are busily engaged in putting up a substantial engine house.

Potosi is quiet, owing probably to the announcement of an assessment of \$50 per foot. It is said that the present indebtedness of the Company is small but that further outlays will be soon required in the thorough development of the Company's mine.

Savage is well maintained, and favorably regarded by per-



The Office of the MINING AND SCIENTIFIC PRESS, has been removed to Rooms Nos. 56 and 57 Government House, corner of Washington and Sansome Streets. We have been induced to make this change of location, not only with the view of securing more room and better accommodations for ourselves, but chiefly to better accommodate persons having business with the office. Our location is now central, easy of access, and in the direct way of the chief travel of the city to and from the Post Office.



**MINING AGENCY.**—By reference to our advertising columns it will be seen, that we have made arrangements to obtain special information, through a resident correspondent, with regard to any particular mine at Reese River. Parties in the city about to invest in "feet" in that neighborhood, and not having time or caring to incur the expense of visiting the locality, will do well to avail themselves of the opportunity hereby presented in securing reliable information, previous to investment, at a moderate cost.

Persons already holding "feet" and desirous to learn through a disinterested source the actual condition of the mine in which they may be interested, will do well to embrace the opportunity here presented of securing the desired information.

We shall establish agencies similar to the above in all the principal mining districts, at an early day.

### A New and Valuable Book.

**Process of Silver and Gold Extraction,** by Guido Kustel, Mining Engineer and Metallurgist, former manager of the Ophir Works, 803 pages octavo illustrated.

This admirable work has met with the highest commendations from the Press and Scientific men, as a clear and able exposition of the science as practiced in California and Nevada Territory—it is written for the people in good plain English and finely illustrated.

Price—post paid—Cloth \$6; Sheep \$7.

A. ROMAN & CO.,

Booksellers, Importers and Publishers,  
417 and 419 Montgomery street,  
San Francisco.

nov30

BAAC TABOR.

JOHN HILL.

### Tabor & Hill

#### Stock Brokers & Real Estate Agents,

503 Montgomery St., cor. Sacramento,

Buy and Sell Mining Stock on Commission. Are members of the San Francisco Stock & Exchange Board, and of the, San Francisco Board of brokers. nov23

#### Giffards Injectors,

FOR SUPPLYING OILERS WITH FEED WATER without Pumps. No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODART, Agent,

je22 Cor. Pine and Front Sts., San Francisco.

### VULCAN IRON WORKS COMPANY,

P. Torquet, Manager,

#### STEAM ENGINE BUILDERS

#### and BOILER MAKERS,

#### Iron Founders and General Engineers,

No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing Machinery.

Shoes and Dies of the hardest iron,

Russian iron Punched Screens.

Steamboat Machinery: Saw, Flour and Sugar Mills.

High and Low Pressure Boilers of all Styles.

JOURNAL and other Turbine Water Wheels with latest improvements.

[From the Daily Alta.]  
San Francisco, June 30th, 1863

ED'S DAILY ALTA:

Permit me through your widely circulated journal, to say, that my daughter Mary Ellen, has been afflicted with deafness since she was thirteen months old, and that she has been a member of the Deaf and Dumb Institute since it was organized. On taking her to Dr. De Castro, on the corner of Kearney and Market Streets, and undergoing under his direction, two operations, she has heard sound very distinctly; and is now, I am happy to state in a fair way to get permanent relief. The result, thus far, is satisfactory; and I deem this notice due to Dr. De Castro for his skill; and would recommend all parties similarly afflicted to give him a trial. My daughter has at different times been under the care of the most skillful physician and artists in California, but up to the period of visiting Dr. De Castro, received no benefit.

CHAS JOHN P. WRIGHT,  
812 Greco Street.

**Mr. Editor**—Having been afflicted with deafness for the last two years, originating from a severe cold, and for the last month suffering from the most excruciating pains in my ear, I was obliged to come down to San Francisco to seek relief. After a physician's recommendation to wait on Dr. De Castro, on the corner of Kearney and Market streets, and underwent one operation, and it is with the utmost pleasure I can say my hearing was suddenly and without pain entirely restored. I deem it my duty to make this known to the public, and to recommend Dr. De Castro's skill as an earist.

James Callaghan, witness,  
San Francisco, July 30th, 1863.

**Ruth Windsor Tunnel Company, Esmeralda district.**—Notice is hereby given that an assessment of fifty cents per share was levied on the capital stock of the above company on the 21st day of September, 1853, payable immediately to the Secretary at his office in United States gold coin.

By order of the Trustees  
T. L. Biddings, Secretary, 305 Montgomery St.  
San Francisco, October 13, 1863.

### GENERAL NOTICES.



DR. H. AUSTIN,

DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

### DESKS

AND

#### Office Furniture,

OF ALL KINDS.....FOR SALE BY

JOHN WIGMORE,

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all Kinds, attended to.

### SQUARZA'S PUNCH.

#### FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

#### ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

#### FREDERICK MANSELL,

#### MECHANICAL & ARCHITECTURAL

#### DRAFTSMAN,

No. 422 California street, corner of Leidsdorff

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

### El Paso District, Los Angeles County, MINING AGENCY.

C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

LETTERS OF ENQUIRY, containing Revenue or Postage Stamps to the value of fifty cents, will be promptly attended to.

The subscriber has a carefully prepared map, (and specimens) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to J. Burnett, Esq., 425 Davis St., San Francisco-Cal.  
El Paso, June 21, 1863. C. W. TAPPAN. aud1

#### R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,

JOB TURNING & SCROLL SAWING.

#### BRACKETS,

#### RED WOOD BALUSTERS,

#### NEWEL AND CEDAR BALUSTERS

for Stairs.

Manufacturers of every description of Oval,

Circular and Square

PICTURE & LOOKING GLASS FRAMES

For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS.

H. C. SOMES

### MINING LAWS AND FORMS

JUST PUBLISHED BY H. H. BANCROFT & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. sep14

### H. C. KIBBE,

#### MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

### GENERAL NOTICES.

### New Patent Agency.

WE HAVE CONNECTED WITH THE Publication of the "MINING AND SCIENTIFIC PRESS"

#### The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

**Mining and Scientific Press Agency** The most desirable place to make application for Letters Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room No. 57, Government House, corner of Washington and Sansome streets, San Francisco. EWER & SMITH.

#### FOREIGN PATENTS OBTAINED

By application at this office, Room 57 Government House. EWER & SMITH, Solicitors.

#### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

#### PATENT RIGHTS.

Patent Rights Bought and Sold. At the office of the "Mining and Scientific Press" Agency EWER & SMITH.

#### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to all them in introducing their inventions to the public will be found a most important advantage to inventors. EWER & SMITH.

### WHEELER'S

#### Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to flow the triturating loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained the large percentage of metals over its competitors, as well as an still larger percentage in the amount of work performed.

\*.\* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. 2016-11 ZENAS WHEELER.

#### Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

#### NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Webster

SAN FRANCISCO.

GEO. A. METCALF.

D. S. HUTCHINSON.

#### METCALF & HUTCHINSON'S

#### PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

#### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

\$3. Per Dozen!

Large sized Photographs \$3—Extra copies \$1 each. AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

### HOTELS.

### International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

#### FIRE-PROOF BRICK BUILDING.

Most convenient to the

Steamer's Landing, Business sts. & Places of Amusement

#### OPEN ALL NIGHT.

City Railroad Cars Pass the Door.

#### REDUCTION IN PRICES.

Fine Bathing Rooms attached to the Barber Shop

Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality

Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

#### BEST FURNISHED FAMILY ROOMS;

and sets AS GOOD A TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

### Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,

WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. We solicit a CALL FROM ALL.

F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurnished the International Hotel, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

### THE RAILROAD HOUSE.

Nos. 318 and 320 Commercial & Clay Sts.,

SAN FRANCISCO.

H. T. FELTON,..... PROPRIETOR.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House Free of Charge.

The House is open all night.

### P. M. S. C. O.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

#### FOR PANAMA.

The following Steamships will be dispatched in the month of November, 1863.

Dec. 3d - - - - Steamer Orizaba.

Dec. 12th, - - - - Steamer Golden City.

Dec. 23d - - - - Steamer St. Louis.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY.

And connect, via Panama Railroad, at Aspinwall, with

teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidesdorff sts



FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

FOUNDRIES & MACHINE SHOPS.

THE MINES OF MEXICO.—The Echo du Pacifique, in an article on the mines of Mexico, says:

"It is necessary to give the Americans their due. No nation in the world has such an enterprising and adventurous spirit. When we look at the present development of the Mexican mines, and when we consider the past, we are astonished at the listlessness of one people and the audacity of the other. Some of these mines which for generations have remained in oblivion, or have been buried under the mass of ruins which had gathered in them, or have been filled with water, are now re-opened and worked at a profit. The indifference of the Mexican yesterday makes the wealth of the American to-day. The ambition of the American, his pride, and his sovereign contempt of everything but himself, may alienate the affection of other nations, but it is not the less true that wherever he goes fortune accompanies him, life expands and abundance reigns. Certainly his manners and laws do not please everybody; but it must be admitted that nature has gifted him with exceptional qualities, and that he is indeed the man for our new countries. In his hands the mines of Mexico will exhibit a wealth not yet suspected by the world."

ROTHSCHILD has taken four million pounds sterling of French treasury bonds at five per cent. interest—the whole loan is \$60,000,000.

COLT'S ARMY in Hartford made a gun a minute, for ten hours a day, during the month of October.

PATENT CLAIMS.—We will furnish, on application, the claim of any invention that has been patented within the last fourteen years. The name of the patentee—date of patent, when known, and two dollars for copying should be sent.

MODELS.—Inventors will please attach to all models sent to us, their names and address, in a legible, permanent form, this will avoid confusion and prevent errors.

DRAWINGS.—We have highly talented and efficient draughtsmen, by whom drawings of every description are executed in the best style of art, with promptitude and at a moderate cost.

#### WANTED

By a competent person, the Secretaryship of four Mining Companies. Books to be kept at the Office of the Mining and Scientific Press, No 57 Government House inquire as above. oct5

### MINING & SCIENTIFIC PRESS.

THE ONLY MINING, MECHANICAL AND SCIENTIFIC PAPER ON THIS CONTINENT.

This paper is devoted to the above purposes, together with the interests of Science, Arts, Agriculture and Commerce, and any general information that may be of interest to the reader; and it is the intention of the proprietor to spare no pains or expense in making it equal in interest and valuable information to any paper yet published.

#### The Inventor!

Will find it an excellent medium for the purpose of bringing his invention into notice, of ascertaining the progress of invention in this and other countries, and also of receiving any information that may be necessary in obtaining his patent, the proprietors having had great experience as Patent Agents, together with facilities at Washington that enable them to obtain Patents with dispatch.

#### The Mechanic and Manufacturer!

Will be greatly benefited by its perusal, as its columns will from time to time contain original engravings of new machines and inventions, together with a large amount of readable matter appertaining thereto. We are constantly receiving the best scientific journals from all quarters, from which we shall continue to extract whatever may be of benefit or interest to our readers.

#### The Mining Interest!

Will find it of great value, as it will contain all the news appertaining to Mining, the prices and sales of Mining Stocks, new inventions of Machinery adapted to that purpose, and of everything generally that may be of service to the Miner.

To Chemists, Architects and Millwrights. This journal will be invaluable. All new discoveries in Chemistry will be given, and a large amount of information of great service to Architects and Millwrights will be found in our columns. The Farmers and Planters will not be neglected, engravings will be given of agricultural implements, and the farming interest generally will be amply discussed.

Names can be sent at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

Room 57, Government House, Corner of Washington and Sansome streets, San Francisco.

## REYNOLDS'

Patent Cut-Off and Governor, FOR STEAM ENGINES.

127 of these Invaluable Machines, ARE NOW IN USE In California and Nevada Territory, giving a perfectly regular motion and Saving 20 to 65 per cent of the Fuel.

### Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to act and most liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

### Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to pound on the square inch. It cures get-out of order and any person can put one up in an hour after the damper is put in.

### Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

### Felt for Steam Boilers, Pipes, Etc.,

At the lowest market rates.

### Steam Engines, Boilers, Pipes,

Hydraulic Presses, Shafting, Pulleys, Etc., at the lowest market rates.

### Anti Incrustation Powder,

A Sure Remedy for Scale in Steam Boilers, without injury to the metal. In use for the past eight years. Refer to—Sugar Refinery, San Francisco, Cottrell & Co., San Jose, L. A. Booth, Esq., Virginia City, and 2,000 others in the United States. E. T. STEEN AGENT. No. 33 Fremont Street, San Francisco.

## PORTLAND BOILER WORKS.

MOYNIHAN & AITKEN,

Boiler Makers & Sheet Iron Workers,

Mission, between Beal & Fremont Sts, San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms. Jy 29

## PUMPS!

HARRISON'S

California Lift and Force Pump,

WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the Cheapest, Lightest and most Durable, and least liable to get out of order, of any Pump yet invented.

ALL SIZES;

Capable of throwing from ONE HUNDRED TO FIVE THOUSAND Gallons per Minute—For sale by

C. H. HARRISON,

PHOENIX OIL WORKS,

Je-15

517 Front Street, San Francisco.

50 lbs. MARINE and

Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

#### DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil. For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire-Proof, and costing less than any paint.

#### DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead. ROOF:—Five parts of Mineral Paint, one part white Lead, mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,

G. T. FOUQUE, Superintendent.

WORKS, North Beach; Office, 509 Sacramento st., San Francisco.

PALMER, HANSCOM & CO.,

GOLDEN STATE IRON WORKS,

No. 10, First Street, San Francisco.

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DISS.

PALMER, HANSCOMB & CO.

To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the extracting of floating gold and silver, known to be other wise lost. Made exclusively by

PALMER, HANSCOMB & CO., GOLDEN STATE IRON WORKS, Nos. 10 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms, for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. W. A. PALMER.

JOHN P. GALLAGHER.....JOSEPH H. WEED.

GALLAGHER & WEED,

BRASS & BELL FOUNDRY

AND

LOCK FACTORY.

No. 125 First Street, opposite Minna, next door to Pacific Foundry, all kinds of

Brass and Composition Castings and Finishing, done with neatness and dispatch.

CHURCH AND STEAMBOAT BELLS, OF ALL SIZES Made to order. Engine's Gongs made and hung in the best manner. Bank, Vault, Store and Prison Locks, also Brass Padlocks and Shop Locks of various patterns, on hand and made to order.

Particular attention given to casting Rudder Braces and Ship Work in general.

All Jobs promptly attended to.—Prices moderate.

Removed from Oregon street, between Front and Davis.

Miners' Foundry

—AND—

MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS Machinery, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Steam Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\*Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING

San Francisco, February 23, 1863.

San Francisco Machine

....AND....

IRON WORKS!

Northeast corner Fremont and Mission Streets.

ALL KINDS OF MACHINERY MADE TO ORDER ON most reasonable terms.

Steam Engines, High and Low Pressure; Quartz mills, Saw mills, Mining Pumps, Hoisting machines for mining purposes, Wine Presses, Agricultural implements etc, etc, and Castings of all descriptions made to order. Steam Engines exchanged and for sale by

DEVORE, DINSMORE & CO.

REPAIRING promptly attended to.

FOR SALE.

San Francisco, July, 1858.

Jy18

W. T. & J. GARRATT,

City Brass and Bell Founders

Cor. First & Market sts., San Francisco.

BABBIT METAL CASTINGS, FIRE ENGINES, FORCE and Lift Pumps, Church and Steamboat Bells, Taps, and Hot and Cold Water, Hose and all other joints, Gauge cocks, Cylinder cocks, Oil valves, Steam Whistles, HYDRAULIC PIPES and NOZZLES for MINING PURPOSES, Iron steam pipe furnished with fittings, &c.; COUPLING JOINTS of all sizes. Manufacturers of "Star rat's Patent Improved Journal Metal."

D. MORRIS,

MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. Jc13

LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Lister Making Establishment on the Pacific Coast owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets. Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY

J. N. RISDON.

THEODOR KALLENBERG

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Engraving Stamps. Repairing of Machinery promptly attended to. No. 418 Market street, San Francisco. Jy 3m)

HEPBURN & PETERSON'S

AMALGAMATOR.

The subscribers would call the attention of the Mining Public to their Reducer and Amalgamator, and also to their Separator for reducing and separating the mineral from

GOLD AND SILVER ORES,

manufactured and exhibited at the Vulcan Iron Works, Nos 137 and 139 First street, San Francisco.

These machines secure to the miner a more Expeditious and Perfect Reduction and Amalgamation, a less liability to accident and delay, and a greater amount of useful effect in proportion to the power employed to keep them in operation than any other machines now in use for producing similar results. This fact is attested to by their general adoption and preference at all the principal Reduction Works in Nevada Territory; among which may be mentioned the Gould & Curry Mill, the Silver state Reduction Works, Yaphy Flat Mill, Pioneer Mill, Eastern Slope Mill, Phoenix Mill, etc. nov 8 3m

HEPBURN & PETERSON.

KUSTEL & DEETKEN'S

METALLURGICAL WORKS,

FOR THE REDUCTION OF

SILVER AND GOLD ORES,

Tailings, Sulphurets, Arsenurets, Etc., Etc.,

Capellation and Refining of Silver and Gold,

Practical Assays for Silver and Gold,

in Small and Large Quantities, by Smelting, Chlorination and Pan Manipulation.

WORKS—On the San Bruno Road.

OFFICE—No. 605 Montgomery st, San Francisco.

nov 7 tf.

SOUTH PARK

Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO.

Office at the Mill, South Beach and Third St.

Je13

W. R. WATERS Secretary.

W. W. HANSCOMB,

Steam and Mechanical Engineer,

Designs furnished, and Drawings made for

Engines, Mills, Water Wheels, Mining Ma-

chinery, etc., etc. Agent for MacKenzie's

Patent Cupolo and Blower.

At Golden State Iron Works,

aug x

First Street, San Francisco.



## CROCKER'S

STOCK AND ASSESSMENT LEDGER.  
Copyright Secured—Price \$10.

The necessity of a proper book for keeping the Stock and Assessment accounts of Corporations has long been very much needed. One that would combine economy and simplicity, and would not require the services of an experienced book-keeper to keep the accounts correctly. CROCKER'S STOCK AND ASSESSMENT LEDGER has met this requirement; we have submitted it to several Secretaries of corporations, and they acknowledge that the plan is admirable, and just what has long been wanted. The printed headings are a perfect explanation of the manner of keeping it; and any person, whether they understand book-keeping or not, cannot make an error in the accounts. The Stock and Assessment accounts are so arranged that the Secretary can in a moment tell how any stockholder's account stands, both in regard to Stock and Assessments. He can also, with the greatest ease, trace any certificate, through any number of transfers, to the original one issued. It saves a great amount of labor, as it does not require one-fourth the writing of the ordinary method. It dispenses entirely with the old style of Stock Ledger, Stock Journal and Assessment Book, all three of which Secretaries have heretofore been obliged to keep, consequences of the whole in one book. A person who is Secretary of several companies, this book will prove invaluable, and we feel no hesitation in guaranteeing satisfaction to those who may order them. Specimen sheets sent to those who desire to examine it. The books are ruled with one or two accounts to the page. State which is preferred.

Published and for sale, wholesale and retail, by  
**H. S. CROCKER & CO.,**  
Book and Job Printers, Sacramento.

## Certificates!

And complete sets of books for Corporations, in the finest style, at short notice, and low rates. 7-1m

## MINING NOTICES.

**Enterprise Copper Mining Company.**—Office 528 Montgomery street, San Francisco. At a meeting of the Board of Trustees of this company, held December 12th, an assessment of ten cents per share was levied, payable immediately, and another assessment of eight cents per share, payable January 1st, 1864, and another assessment of eight cents per share payable February 1st, 1864, all payable in U. S. gold coin, to Thomas S. Levy, the Treasurer, at Lincoln, Placer county, or to the Secretary, at the office of the Trustees.  
By order of the Board of Trustees.  
7-1 feb1 M. G. ELMORE, Secretary.

**Wide West Copper Mining Company.** Office 528 Montgomery street, San Francisco, December 12, 1863. Notice is hereby given that assessment No. 2 of twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, payable in U. S. gold coin, to the Secretary at the office of the Company, or to J. M. PIKE, Superintendent, Copperopolis.  
By order of the Board of Trustees.  
7-1m M. G. ELMORE, Sec.

**Emmett Copper Mining Company.**—Notice is hereby given that at a meeting of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No. 528 Montgomery street, San Francisco, December 3, 1863, an assessment of twenty-five cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to L. HONIGSBARGER, Copperopolis.  
By order of the Board of Trustees.  
6-1m M. G. ELMORE, Secretary.

**Mammoth Consolidated Gold & Silver Mining Co.,** Excelsior District, N. T.—Office 528 Montgomery St., San Francisco, Nov. 28, 1863. Notice is hereby given: there will be sold at Public Auction, at the office of the Company, in San Francisco, on Saturday January 9th, 1864 at 12 o'clock, M. of that day, to the highest bidder for cash in U. S. gold coin, so many Shares of the Capital Stock of said Company standing in the names of the following shareholders as will be necessary to pay assessment No. 1, of ten (10) cents per share, duly levied thereon by the Board of Trustees on the 9th of May, 1863; also assessment No. 2, of thirty (30) cents per share, duly levied thereon by the Board of Trustees on the 27th of June, 1863, together with all the expenses of advertising and sale, unless and a second assessment are previously paid to M. G. Elmore, Sec., San Francisco, or to W. H. Dalrymple, Financial Sec., Aurora. Names No. Cert., No. Ass't., Shares, Am't.  
M J Brown.....6 & 7 2 25 \$7 50  
J B Best.....74 343 1 2 300 115 00  
G W Bally.....344 1 2 200 80 00  
G C Chien.....383 to 37 incl' 2 100 30 00  
J J Coddington.....358 1 2 56½ 22 50  
D C Crocker.....334 1 2 250 100 00  
T A Cutter.....25 393 to 403 incl' 2 125 \$7 50  
J R Dulestone.....27 28 1 2 50 20 00  
U B Freaner.....50 to 57 incl' 1 2 200 80 00  
WD Garland.....437 442 to 450 2 275 82 50  
DH Haskell.....55 to 69 incl' 1 2 60 20 00  
W A Holt.....70 71 72 2 25 7 50  
James Jaques.....333 1 2 250 100 00  
R P Johnson.....443 2 100 30 00  
A B Kelly.....276 to 281 incl' 2 100 30 00  
J H Latham.....283 384 285 to 291 incl' 2 60 16 93  
E J Matthews.....342 2 200 60 00  
W Mason.....92 482 2 13 3 50  
John Patten 416 417 2 15 4 50  
Geo Raymond.....128 to 131 incl' 2 125 37 50  
G H Rogers.....136 to 142 incl' 2 200 60 00  
J S Shultz.....161 487 1 2 95 30 00  
G D Myers.....360 1 2 5 2 00  
A J Severe.....170 to 189 incl' 2 200 60 00  
N Steiner.....118 to 124 incl' 1 2 100 40 00  
J W Smith.....191 191 192 2 75 20 00  
H S Van Dine.....215 358 1 2 175 68 75  
H Watson.....263 to 267 incl' 2 25 7 50  
W J Vernon.....241 242 2 40 10 50  
By order of Board of Trustees.  
M. G. ELMORE, Secretary.

## ASSAYS!

Promptness and Accuracy Secured  
By THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,** (From Europe.)  
24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. 11y6  
"HINTS FOR PROSPECTORS" Free by Post.

## Mining Shares For Sale

BY  
**C. A. CRANE,**

Office 28 Government Block.

475 Shares U. S. Mining Company, Virginia City.  
910 Shares Granada Gold and Silver Mining Company  
Virginia Hill, Virginia City.  
168 Shares Even Consolidated Copper Mining Company,  
Crescent City, Cal.  
20 Shares Mohave Mining Company, La Paz District,  
Colorado, N. M.  
30 Shares Aspinwall Gold and Silver Mining Company,  
Devil's Gate District, N. T.  
75 Shares Washington Copper Mining Company, Indian  
Bar, Tuolumne Co.  
228 Shares Montezuma Gold and Silver Mining Company,  
Inyo District, Tulare Co.  
90 Shares Owen's County Consolidated Gold and Silver  
Mining Company, Inyo District, Tulare Co.  
50 Shares Crown Point Ravine Gold and Silver Mining  
Company, Virginia District, N. T.  
10 Shares Triunfo Gold and Silver Mining Company,  
San Antonio District, Lower California. sep28

## N. LOMBARD INGOLS.

Accountant and Mining Secretary,  
No. 10 GOVERNMENT HOUSE, Cor. Washington & Sansom Sts.

## OFFICE OF THE

**Santa Cruz Petroleum Oil Works Co.,**  
**Gem Silver Mining Co.,** (Reese River, N. T.),  
**Laurel G & S Mining Co.,** Copala, Sinaloa, Mex.

N. B. Mr. Ingols will pay particular attention to the  
adjustment of complicated accounts. Commercial and  
Incorporated Companies' Books, to drawing up Commercial  
writings and to Engraving legal or other documents with  
neatness and dispatch. An experience of more than  
twenty-five years in every branch of his profession is  
a guarantee of his practical and thorough acquaintance  
with its duties. He has the privilege of referring to  
some of the leading mercantile houses and legal practitioners  
on the Atlantic and Pacific sides, for testimony  
of his business and clerical abilities.

**Heyer Bros.,** 406 Battery Street  
76 and 78 Federal Street, BOSTON. SAN FRANCISCO.

## HEYER &amp; CO.,

IMPORTERS OF

AMERICAN AND EUROPEAN

Fancy Goods, Toys & Musical Instruments; also,

COATS, PERFUMERY, HAIR AND TOOTH BRUSHES,  
Port Folios, Portmanteaus, Ladies' Bags, Photograph  
Albums, Cutlery, Willow and Parian Ware, Children's  
Carriages, etc., Our Stock of Violin, Guitar and other  
Strings is very large. Our Foreign Goods are selected  
by one of the firm, and the American by the Boston  
House (established 1824.) We have the Sole Agency for

**Hallet & Davis' Boston Pianos,**  
**Smith & Bros' Harmoniums, and**  
**Treat & Linsley's Melodeons.**

The Hallet & Davis Pianos are each supplied with their  
Patent Suspension Bridge, which is a decided improvement.  
It gives a full and clear vibration in the upper  
octaves, producing a quality of tone unequalled in firmness  
and purity. Our Melodeons and Harmoniums are of  
the best quality, and warranted to give satisfaction. 3m

## AGENTS WANTED.

We want a good Agent in every city, town and settle-  
ment, on this Coast. Applicants will send their names  
with reference, when specimen numbers of the **Min-  
ing & Scientific Press** will be forwarded to them,  
and their names added to our published "List of Agents."  
EWER & SMITH.

## Owens River Canal Company.

FOR SALE,

FOR ACCOUNT OF THE COMPANY, 7,000 SHARES OF  
the above stock, at \$1 per share. It is cordially  
presented to the public as the best investment, for the  
price, now offered in this market.  
Office of the Company No. 328 Montgomery street.

## REMOVAL.

**OFFICE OF THE PACIFIC METAL**  
urgical Office is removed to 509 Sacramento street  
Having enlarged our Works at North Beach, we are  
now enabled to reduce from 10 to 15 tons of Silver or  
Gold rock per day.  
Gold and Silver ore, and Sulphuret Assayers', or Sil-  
versmiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in  
cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

## MINING CARDS.

## OWEN'S RIVER CANAL COMPANY.

Capital Stock ..... \$1,000,000.

10,000 Shares ..... \$100 per Share.

A Portion of this Stock is no offered to  
the public, and recommended as an investment.  
**FULL PAID AND UNASSESSABLE**  
Stock, also Assessable Stock, can be obtained of A. J  
DOWNER & CO., the authorized Agents of the Company  
406 Montgomery street.

President.....R. S. WHIGHAM.  
Secretary.....W. FISK HICCOCK.  
Treasurer.....MONTGOMERY GODLY.  
Superintendent.....WILLIAM FLEMING.  
Engineer.....J. E. CLAYTON.

## TRUSTEES:

R. S. WHIGHAM, formerly of Whigham's Mill, Nevada  
City.  
WILLIAM FLEMING.....of San Francisco.  
SPEIR RIDDEL.....Paying Teller of Parrott & Co's.  
ISAAC SWAIN.....of A. J. Downer & Co's.  
WILLIAM P. PRATT.....of Nash & Fogg.  
Office of Company 328 Montgomery street  
28-cp

JOHN ARMSTRONG. WM. P. WILDER.

## ARMSTRONG &amp; WILDER,

VIRGINIA CITY, N. T.,

SEARCHERS OF RECORDS  
for Mining Claims & Real Estate.

RELIABLE ABSTRACTS  
guaranteed at reasonable prices.

LETTERS OF ENQUIRY  
promptly answered.

ALEXANDER STOTT,  
MINING SECRETARY,

512 Sansome Street, San Francisco.

Secretary of—

HORSE SHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

## T. C. Sanborn &amp; Co.

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

## OPHIR SILVER MINING STOCK,

GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

## NEW MINING AGENCY.

WE HAVE MADE ARRANGEMENTS WITH A SPECIAL  
Correspondent at Austin, Reese River, by  
which any information attainable with regard to any  
particular mine in that locality can be obtained, for the

Private Benefit of Parties

in this City or elsewhere. Our correspondent will visit  
any mine which may be designated and report upon the  
general characteristics and condition of the same, the  
amount of work which may have been done, etc. A reason-  
able fee will be required for such service. For further  
information apply at this Office.  
EWER & SMITH.

## L. F. LELAND,

## STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2½ to 3½, P. M.

Member of the San Francisco Stock and Exchange Board  
je-29

## AGENCY

For the Purchase and Sale of

## MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SIL-  
ver Mining Companies, San Antonio District, Lower  
California.

All persons are invited to call and examine Ores from  
the above mines.  
je13 Wm. FAULKNER.

## New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED  
Agents for the above Company, are receiving regu-  
lar supplies of their superior manufactures of

SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market  
rate, and on the most favorable terms.  
MORGAN, STONE & Co.  
je-29 108 Front Street, San Francisco.

## BUSINESS CARDS.

**A. C. MORSE,**  
Mining and Real Estate Agent,  
Office—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS**  
with MEXER S. MARTIN Esq., one of the principal  
Stock Brokers of San Francisco, I am prepared to BUY  
and SELL every description of Mining Stocks in same  
district

## GOLDEN AGE G. &amp; S. MINING CO.

Austin, Reese River.  
OFFICE, 57 Government House.  
WM. POOLER, SEC'Y.

## Fire Hose! Fire Hose!! Fire Hose!!!

J. P. D. WILKINS,

The celebrated HARNESS MAKER of Stockton, maker  
Fire Hose, from the best material, and WARRANTED  
a trial of the Weber Steam Engine Co., No. 3, of the city  
of Stockton. This Hose is manufactured at his establish-  
ment, and known to stand a pressure of 125 pounds to the  
square inch; as certified by the Chief Engineer.

ALSO FOR SALE,

All kinds of HARNESS and SADDLERY, at the lowest cash  
prices. Repairs done promptly, one door west of the  
Main Street Stable. oct12

## WANTED,

**GOLD QUARTZ SUITABLE FOR**  
CUTTING JEWELRY,

By FRONTIER A. DEVIEROY,

au3f 437 Pine street, San Francisco.

THE EUROPEAN  
ORE REFINING  
COMPANY.

Quartz Mill and Furnaces, Bryant Street  
Crossing Third, San Francisco.

RECEIVE ALL KINDS OF

**ORES AND MINERALS.**

In large or small quantities, for such Experienced Treat-  
ment by the

**LATES EUROPEAN METHODS,**

As may be ascertained by

**CAREFUL ANALYSIS,**

At their works, to be the most Effectual in obtaining re-  
liable results, and afterwards converting whatever pro-  
pious Metals they may contain, into marketable Ingots,  
The South Park, and Folsom and Kearny street Cars  
pass Bryant street. au31

## The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF

COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SULPHURETS CONTAINING GOLD.

Due account taken of all valuable metals combined  
with Silver and Copper Ores, and advances made there-  
for.

Parties owning undeveloped mines and desiring capital  
to prospect the same will receive assistance, if, upon ex-  
amination, such leads are deemed sufficiently valuable  
to justify such expenditure.

OFFICE, No. 1, ODD FELLOWS' HALL,  
je1-1f Montgomery Street, San Francisco.

## MARTIN &amp; Co.,

OFFICE--224 Montgomery Street, Up Stairs,  
WILL CONTRACT FOR THE

## Purchase of Copper Ores

Assaying 8 per cent and upwards of Copper to the Ton

We will make ADVANCES upon Ores of COPPER, TIN,  
and NICKEL.

Sacks will be furnished and Freight Paid on all con-  
signments if desired by the consignors.

HENRY MARTIN,

New York.

J. F. GREENMAN,

San Francisco,

San Francisco Post Office, Box 1259.

je 1.

## NORTH BEACH QUARTZ MILL

and  
REDUCTION WORKS

Are prepared to work Gold and Silver ores, in large or  
small quantities.

Working assays made of small lots, and all kinds of  
ores crushed at short notice.

Our new and complete Machinery, will enable us to  
give results fully up to the merits of rock.

WHEELER & THAYER, Proprietors.

C. C. JONES, Amalgamator

San Francisco, Oct. 18, 1863.





A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VII. SAN FRANCISCO, MONDAY EVENING, DECEMBER 21, 1863 NO. 8.

### ENLARGEMENT AND IMPROVEMENT OF THE MINING AND SCIENTIFIC PRESS.

SATURDAY, JANUARY 2, 1864.

The publishers are pleased to announce the enlargement of this journal on the 2d of January next, from eight to sixteen pages—double its present size.

#### NOTICE.

The publication of the MINING AND SCIENTIFIC PRESS will hereafter be conducted by the firm of DEWEY & CO.

C. W. M. SMITH,

W. B. EWER,

A. T. DEWEY.

San Francisco, Dec. 1st., 1863.

#### TERMS OF SUBSCRIPTIONS.

Upon enlarging our sheet, we have determined to adhere strictly to the advance payment for subscriptions, and shall make only a slight advance in old prices. Our rates, hereafter, will be as follows:—For one year, \$5.00; six months, \$3.00. By city carriers, 50 cents per month.

#### To Advertisers.

The circulation of the Press throughout all the Mining Districts of this State and Nevada Territory, renders it a desirable advertising medium for Mining Companies, Inventors, Patentees, Machinists, Manufacturers, Builders and Tradesmen. Terms reasonable and uniform.

Advertisements for the first issue of our enlarged series, should be handed in at an early day.

#### Sacramento Agency.

W. B. Rice, at the book-store, 146 J street, between 5th and 6th, is our agent for Sacramento city.

#### Our Address.

Parties addressing this office should be particular to write the name MINING AND SCIENTIFIC PRESS in full, to avoid all liabilities of mis-takes.

**BUFFALO.**—A fine buffalo is on free exhibition in an enclosed lot on Third street, near Perry. The animal has been sent from a small calf at Miller's ranch, San Joaquin valley, and is very tame, allowing itself to be handled by those who have it in charge. It has been brought to this city to be slaughtered. It is said that there are but three other buffaloes in this State, which are in Los Angeles county. Large groups of men, women and children may be seen at almost all hours of the day peering through the fence bars, to get a sight at the animal.

**AFTER THE GOLD SPECULATORS.**—Senator Lane of Kansas has introduced into the U. S. Senate a bill providing for the traffic in gold and silver and foreign exchange, for speculative purposes, or the purchase through a broker for less than the full amount of purchase, or in what is known as "margin," is prohibited. It also prohibits sales of gold actually delivered and paid for on delivery, under penalty of not less than \$1,000 nor more than \$2,000 and imprisonment from one to twelve months. The bill should become a law.

**SOME** learned chemists have been trying to find out the color of the salmon, which is not half so important as to know how to catch them. Dr. Davy Macdon says: "Their color is partially due to the nature of their food, and a special secreting power." A safe opinion.

**MR. N. P. WILLIS.** wife of the poet Willis, is teaching school at Idlewild, on the Hudson.

#### TAXING THE MINES.

The Secretary of the Interior, in his report, a synopsis of which has been received by telegraph, still persists in his favorite theory of taxing the mines. The Secretary states that at the time of the discovery of the great mineral wealth of portions of the public domain, the nation was in the enjoyment of domestic tranquility and unrivaled prosperity, and could well afford to throw open her rich mines of precious metals to the unrestricted enterprise of the world; but having now been forced into war for the preservation of our national existence, as unexampled in expense as in magnitude, the question as to whether we can, in justice to other branches of industry and enterprise, longer exempt this immense source of individual revenue from its equitable share of public burden, becomes of much importance. A small proportion of the profits on gold mines would largely increase the means of the treasury, and as no good reason seems to exist why the nation should not, in its hour of need, derive some direct assistance from its extensive fields of gold and silver mines, he earnestly presses the consideration of the subject with a view to that end.

By the provisions of the income tax the mines of the Pacific Coast are already taxed in proportion to all other industrial pursuits, and we do not know that any serious objection has ever been urged against such a policy. There is no disposition on the part of the miners of California to seek exemption from their just proportion of the burdens which the present unhappy war proposes. No especial tax could well be imposed upon the mines except in the way of licenses, and such an imposition would most assuredly result in producing a falling off in the yield of the precious metals, which would work a far greater damage to the general interests of the government than could possibly be remedied by the direct income it would receive from such a source.

The benefit which the General Government is even now reaping from the mines of the Pacific Slope is by no means confined to the three and five per cent. income tax already imposed. The credit of the Government could never have been maintained at anything like its past and present status had it not been for the millions of treasure which are going forward every month from her mines on this Coast. Without this constant supply of gold, government paper would not today have been worth more than one half its present price. It can scarcely be considered extravagant to assert that the mines of California are actually benefiting the government pecuniarily each month, quite as much as an income equal to the entire yield of the mines for that period would do, if drawn from the ordinary sources of government support.

It is only by keeping these mines open and free to all that this yield can be kept up to its present standard. Imposition of such a tax upon the mines, as is indicated by the Report of the Secretary of the Interior, and the falling off in our monthly yield of the precious metals will affect government securities to an extent many times greater than the entire tax which can possibly be collected. Let the government beware least, by tampering, it kills the goose which lays the golden egg.

**ANOTHER RICH DISCOVERY.**—PERHAPS.—"Cosmos," writing to the *Bulletin*, from Virginia City, under date of Dec. 12th, says that "rumors are afloat respecting a new strike—another Comstock. The ore is of the same character, and assays \$6,000 per ton. I will say no more on the subject till I find out more about it; and besides, you San Franciscans appear to have about concluded that you don't care much about having anything more to do with "feet," anyhow. Several new developments are being brought out in the range below Gold Hill. The one in the Uncle Sam and Mary Ann gives great encouragement to those holding interests in the line, though distant."

**MINERAL WEALTH OF UTAH.**—The Governor of Utah, in his Message just communicated to the Legislature, speaks glowingly of the mineral wealth of that region, and recommends the immediate adoption of the general laws of California on the subject of mines, the incorporation act of that State having stood the test of time and experience. It pays a just tribute to the efficiency, energy and valor of the California Volunteers, and recommends the erection of foundries for the manufacture of iron, from native ore, for the Pacific Railroad. The finances of the Territory are in a good condition. There is now in the Treasury a balance of \$26,799.

**NEW INVENTION IN PICTURE COLORING.**—Herman M. Bien, of this city, according to the *Alta*, has applied for a patent on a newly discovered process of coloring common photographs with oil colors, in exact imitation of nature, which he denominates Photolengraphy. The pictures treated by this process have a sharpness and clearness of outline not attainable by the water color process, and, it is claimed, will retain the color unfaded for any given length of time. For copying specimens in botany, etc., this process would seem to be of great value. The inventor claims that he can color one hundred likenesses by this process in a single day, and have each one a perfect picture.

**OPPOSITION STEAMER DAY.**—The Pacific M. S. Co's Steamship St. Louis, and the Opposition steamer Moses Taylor, leave for Panama on Wednesday, December 23d.

**A REESE RIVER MILL.**—The *Reveille* has the following, in regard to a week's crushing at the Fountain mill, in Jacobsville: Some Yankee Blade ore yielded \$425 to the ton, the bullion from which can be seen at Hayne's saloon in Austin. Amador ore yielded still more, but we did not obtain the exact figures. The Emma Funstan, the rich rock being taken from which we alluded to in a recent issue, worked up to the enormous sum of \$2,700 per ton. During the week this mill has worked ore from the Nonesuch, Marengo, Samantoa, Duukirk and Silver Eagle, but complete returns have not yet been made. It may be stated, however, with a certainty, that the yield of none will fall below \$200 per ton, and in some will be nearer \$2,000.

Pigs of lead, with the name of the Emperor Hadrian upon them, are said to have been found in the Island of Sardinia, where the Romans, as is well known, had important metallurgical establishments. The Marseilles house, Bouquet, which owns extensive mines in the island, has made a present of these pigs to the museum at Cagliari.



[From our Traveling Correspondent.]

## JENNY LIND.

MR. EDITOR:—In my last report I stated I had at last got through both the valleys, and had only to take from this place back to Copperopolis. The mines I shall speak about after finishing those in Jenny Lind, lie west of Copperopolis, a portion of them belonging to the Gopher system, and the balance distinct by themselves running down the valley to White's Ranch, where the Stockton road intersects it, better known to the public as the "Four Springs."

Jenny Lind is a small Mining town on the banks of the Calaveras River, where a short time ago there were some very rich placer diggings. It is somewhere about thirty miles from Stockton. Considerable money circulates at times there, I am told; and it is destined, I believe, to see a brighter day than ever, when its copper interests are more matured and developed; for it cannot be denied that so far as external indications go, the leads show themselves here boldly and strongly; while the result of the work upon them which so far has been done, are by no means unfavorable. In locating the leads at Campo Seco, I laid down a course for the Gopher system, which would bring it through Jenny Lind, and I find strong evidences in every direction of the correctness of that location. These I shall briefly mention as I come to them.

A gentleman by the name of Maccebee was kind enough to accompany me the first day. Crossing the river at the town, and after proceeding some miles to Rich Gulch we found the

## DEHLONOCA.

It contains 2,250 feet divided into seven shares. The croppings and opening here are very good. The rock carries mundic largely, and looks well generally. Work to recommence immediately. Next to this, quite near is the

## WATER PRIVILEGE.

It contains 3,600 feet, divided into 3,600 shares. Here they are running a tunnel from Rich Gulch, and from the excellent appearance of the rock cannot, I judge, have much farther to go. There is also an immense body of mundic here. This claim looks well. Not far from here is the

## EL DORADO.

It contains 5,400 feet, divided into 5,400 shares. Main shaft forty-six feet deep; at present full of water. I do not like the location of this shaft, not being suitable for future work. The rock looks well, and shows a strong vein. From this claim something over a mile south is the

## MAMMOTH.

It contains 4,500 feet, divided into 4,500 shares. Main shaft sixty feet deep. This claim is looked upon as the claim of the place, and certainly the croppings and opening are splendid. The rock also is very pure, strongly impregnated with yellow sulphurets. They have, however, sunk down too far west, the lead having already dipped out of the shaft. They are still sinking with an intention to drift east. I cannot see that policy. The labor they have done since the vein dipped, and the labor they must do before striking it again, would have put a new shaft down on the lead all the way. This will however be a good claim. About one-half a mile east from here is the

## WALLOP.

It contains 4,500 feet, divided into 4,500 shares. Main shaft 98 feet. Work being suspended I could not go down, for water. The croppings and opening are excellent; rock pure, carrying much mundic. Altogether it looks well. Next, still going east of south a mile or more is the

## TEUTONIA.

It contains 7,500 feet, divided into 7,500 shares. Main shaft seventy feet deep, showing a well developed vein and foot wall. Everything here indicates future success. I have formed a very good opinion of this mine. It closely resembles the Collier of Gopher. Out-buildings good. We turn right about here for a short distance, and then come to the

## LAFFERTY.

It contains 3,600 feet, divided into 3,600 shares. Main shaft sixty feet deep; croppings and opening good. Rock pure. Work suspended, to be recommenced the following week. Still continuing back towards the Bushville or Rich Gulch for some distance, we reached the

## ACACIA.

It contains 2,700 feet, divided into 2,700 shares. Main shaft 46 feet deep, carrying a strong vein from one and one-half to three feet thick. It is by no means pure yet, but only

wants depth. Close to this, also under the direction of Mr. Gage, is the

## WYANDANK.

It contains 3,200 feet, divided into 3,200 shares. Main shaft 88 feet; with walls eight feet apart. It opens well with gossan, and shows streaks of mundic, lower down, one foot thick; strongly impregnated with yellow sulphurets. This claim looks well to be a winner.

On the following morning Mr. Brush, an old settler, in whose honor the village was named, piloted me round; and like myself, soon found this copper-mine-visiting among the hills is not quite so pleasant as making New Years calls. On a sultry day it starts the dewdrops. After a long walk, however, we succeeded in reaching the

## PLYMOUTH ROCK.

This claim contains 1,200 feet, divided into four shares. It is a second edition of the Hughes Hill claim, Gopher District, only they have put up a large building with an arrastra to crush the surface rock, clay, talc, gossan, etc. It averages twenty-five dollars to the ton in gold. With their facilities of crushing and getting the rock this ought to pay well. The mill is worked by water-power. In connection with this claim, on the north side of the hill is the

## DIGHTON ROCK.

It contains 4,800 feet, divided into sixteen shares. As I have said already this was in connection with the above, only the company here are working for copper. On the north side of the hill they have run a tunnel 160 feet north; probably 60 feet more to go before they cut the vein. Their level will be 180 feet below the surface. Everything indicates the vein to be as strong here as at the Hughes' claim, and I am greatly mistaken if in the end it is not a splendid mine. Near the south side of the hill, a few hundred yards off, is the

## WIDE WEST.

It contains 6,000 feet, divided into twenty shares. Main shaft 45 feet deep. Here the foot-wall is well developed, with indications of a thick strong vein, probably four feet thick. I consider this a promising claim. Reaching the river, and going out of town, north-east some two miles I found the

## JENNY LIND.

It contains 5,500 feet, divided into 5,600 shares. Main shaft seventy feet deep. Like all the claims in this vicinity the croppings are very handsome. There is unquestionably a strong vein; but whether they will strike it in the present shaft is problematical. This sinking on low ground, expecting thereby to strike copper quicker than elsewhere, is a fallacy which has injured the pockets of several companies in this section. Keep off of low spots and allow for slides, is a good maxim. The rock in the shaft is so rent and twisted, no man can tell which way it really dips. On the opposite side of the river, I think the water has opened the vein to vein. Were I interested here I should examine that closely and be guided by it. My opinion is unfavorable to success in the present shaft.

## A DARING FEAT.

This completes the Jenny Lind list. Upon the whole, the mines look well. They are not developed as much as others because they have had no help from capitalists, but the day is not far distant when it will find its way there. I cannot close this account without mentioning an act of heroism, or rashness, performed here by a lady, which beats Blondin. Across the river a little above the town, the water company have a suspension flume considerably over 200 feet high. Before the pipes were put down, some ladies and gentlemen were examining the works, when a banter was given to walk across. The platform at the most could not be more than one foot and one-half wide, yet nothing daunted, the lady started off, walking across and back again, without a quiver or a halt. What made the feat still more fearful was the fact of the platform having canted in the centre, so that on coming there, she was obliged to walk side-ways. The lady is now married and keeps the Jenny Lind House. If she can't "keep a hotel," where's the woman who can?

Leaving Jenny Lind, I take you to Black's Ranch. This is a continuation of Gopher, being only a mile from the New York claim. The only developed claim here is the

## MURPHY.

It contains 2100 feet in single shares. Main shaft 64 ft., showing a strong vein, nearly twenty feet wide. Rock somewhat corrupt. The walls are very singular; I think they will have to go deep, but they have strong evidences of cop-

per. Near here are quite a number of undeveloped, but promising claims, worthy the attention of capitalists. I cannot do more than name them at present. They are the Munroe, Jefferson, Emerald Isle, National Ledger, Virginia, Pine Grove, Rabbit Hill, Elephant, Josephine, and a gold quartz ledge, Buena Vista. This little, out-of-the-way, obscure corner will make a noise some day. My obligations are due to Mr. Black, who is very intelligent, gentlemanly and well posted in copper feet. From here to Mr. S. Cohen's store is about three miles, where I found the

## SALT SPRING VALLEY CO.

It contains 3150 feet, divided into twenty shares. Main shaft 70 feet, carrying a good vein all the way down. The claim is very important, and excites much attention just now; for, although started for copper, it is supposed to be silver. Of the latter rock, I do not profess to be a very competent judge; but, if in so essentially a copper formation as this district is, it is possible for a silver lode to exist, this must be one. At present, it certainly is not copper. Mr. Cohen intends to send a large lot of this rock to Mr. Clouser, of your city. I hope he will give the Press the result. About a mile from this is the

## HARLEM.

It contains 4500 feet in 30 shares. This claim once reached as high as \$5,000 a share, and it is now lower than it ought to be. All the former work in the old shafts down as deep as 100 feet, was in serpentine rock, and you may as well expect to find gold bearing quartz with horn blende as to find copper in serpentine. I know, very well, copper I found up to the base of this associate; but never in quantity. My opinion is, the copper miner had better buck against a monte bank than serpentine rock, from the one he may get perchance a stray dollar; from the other, nothing. A careful examination of the Harlem confirms this opinion. I was glad to find the Harlem people had commenced a new shaft, altogether away from the serpentine where they have a good prospect. The present shaft open well, and looks promising and hopeful. I have to acknowledge Mr. Westby's particular attention to me. Continuing from the Harlem down the valley, a mile below White's ranch, is the

## WAN.

It contains 3750 feet in 25 shares. Main shaft 54 feet with a very handsome rock indeed. It is on the Harlem lead, and lies west of Copperopolis about two miles. I ought to have been included in my second letter, but at the time I did not know of its existence. The vein looks well carrying yellow sulphurets. It is by all odds too important to be overlooked. Below this claim is another, called the

## MAMMOTH.

It contains 6000 feet in single foot shares. Main shaft commenced, only twelve feet deep. Croppings good. Rock taken out shows strongly of mineral, and some yellow sulphurets. Mr. Ring is superintendent; work suspended in next spring.

I have still three claims to mention, two of which ought to have been noticed in my first letter, but I did not know of them then; the other at that time had not been located. The first is the

## INIMITABLE.

It contains 3000 feet in single foot shares; with two shafts, respectively 30 and 40 feet deep. This is one of the early locations, but only recently attended to, or thought much of. It runs parallel with the Union, on the east and in the first shaft they got good rock; in the second, better. Joining this claim, running out of town south, is the

## METROPOLITAN.

It contains 3000 feet in single foot shares. Main shaft 100 feet deep, showing excellent rock with yellow sulphurets just appearing. The importance of these two claims consists to a great extent, in the fact that they will solve the problem of the linear course of the Union lode, through and immediately south of the town. If the Keystone people get good copper out of their side claim (east) which would be a continuation of these claims running north, as out of old discovery shaft, and it is known they do, these claims become necessarily of great value. As I look at it, the Keystone thus becomes the great claim of the district, and the two eventually of corresponding importance. So impressed is your correspondent with this opinion, that in connection with Mr. Stoddard, he has located 2200 feet in continuation of the Metropolitan, on the south end. With the indication of that claim, so far as the work has gone, we have every reason to be satisfied. Adjoining this latter claim is the

## INDEX.

It contains 2200 feet in 15 shares; in course of incorporation and being opened.

I have now finished the copper claims of Calaveras county as far as practicable. Some few, I know, have been omitted which I was unable to visit on account of the weather, circumstances I could not control. I can truly say I have not intentionally omitted a single one, laborious as the work has been. Whatever I have said of each claim, I have said in a spirit of justice, unbiased throughout by any motive. Some little mistakes there may be, but upon the whole I believe, I may claim to have given a copious and correct count of the present condition, and future prospects of the mine. L. H.



THE AQUILA AND HER CARGO.

The San Francisco Chamber of Commerce held a special meeting on Friday last, to consider what steps, if any, could be taken by that body to further the object of saving the Commanche, so needful for the defence of this harbor. During the deliberations it was made to appear, to the apparent satisfaction of the Chamber, that if the materials of the Commanche, could be landed from the wreck properly and promptly although some parts of her furniture, etc., would be destroyed and other parts much tarnished, still the ship might be speedily re-constructed, and placed in a proper condition for the service, for which she was originally designed. Mr. Ryan, one of the contractors, who was present stated to the Chamber, that the contractors were ready to go on and complete their contract as soon as the material was placed upon the wharf. Mr. R. further stated that insurance to the amount of \$400,000 had been effected upon the Aquila and her cargo which had been transferred to the Government on account of advances made on the contract.

From this statement it appears that the Government has not, in this instance, departed from its well known custom, of never insuring against losses. It merely holds the policy issued to another party as security for advances made. It further appears that the difference of opinion, among the underwriters, with regard to their liabilities in the matter had not been settled, so far as known, up to the hour of the above meeting.

The Chamber having decided that it was proper and expedient that they should take some action in the matter, the following resolution was adopted as a preliminary step:—

*Resolved*, That a Committee of Five be appointed to confer with the Underwriters' Agents in this city, and with other persons, if necessary, and to procure a written statement of all the facts that have been developed concerning the situation and condition of the ship Aquila and cargo, as they now lay, and also to procure a written statement, as authoritative as possible, of the respective claims and liabilities of the parties interested in said ship and cargo, both of which written statements to be submitted to an adjourned meeting of this Chamber, to be held on Monday, the 21st inst. at 2 o'clock, P. M.

It is to be hoped that some definite action will soon be agreed upon, by which the Commanche may be landed and put up as speedily as practicable. We presume that no well informed person entertains a doubt, that had this wreck been private property, in the hands of energetic men of means, and not complicated by an uncertainty of ownership, the materials of the Commanche would, ere this, have been in an advance progress of landing. To think otherwise would be an unjust imputation on the skill of San Francisco Mechanics.

THE EARTHQUAKE, on Saturday afternoon was the severest which has been experienced in this city for the past eight years. Two shocks were felt—the second of which was much the most severe. They were accompanied with the usual rumbling noise, which at our point of observation, in the rear of the third story of the Government House, was quite as distinct and loud as would have been that caused by a heavy lumber wagon driven rapidly and violently over the cobble pavement in the street.

It is said that California produces but little corn. the soil not being adapted to its culture. Most of what is raised is consumed while green, at the table.

THE BRYAN BATTERY.

The vast interest involved in the reduction of area on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most Effective, Economical and Durable Character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect unit—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1880, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed being cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley, San Marcial Co., Mexico, John D. Winters & Co., Esmeralda, Crown Point Co., Gold Hill, Potosi Mining Co., Virginia City, Tajo Mining Co., Mexico, Sheba Mining Co., Humboldt. Lotta Mills Co., Coso. American & Mexican Co., Mexico, San Carlos Mining Co., Owen's River, Union Quartz Co., Aurora, Triunfo Mining Co., Mexico, Napa Quartz Co., Aurora, Petaluma Quartz Co., Gold Hill, Francis Meilus & Co., Slate Range, W. R. Churchill & Co., Mexico, Willow Springs Co., Coso, Hews, Howe & Co., Rich Gulch Flat, F. A. Benjamin & Co., Mexico, O. J. Parker & Co., Nicaragua, Gibbons & Clayton, Esmeralda, Smith & Clouser, S. F. Reduction Works. Amagoza Mining Co., San Bernardino,

MANUFACTURED ONLY BY

GODDARD & CO.,  
At the Pacific Iron Works.

SAN FRANCISCO.

on 125 to 136 First street, and 126 to 144  
Fremont street.

I. C. E. KLEPZIG & CO.,  
GUN MAKERS,  
...AND...  
DEALERS IN GUN MATERIALS,  
733 Washington street, San Francisco.  
[One floor above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Ekland. Je21

LEANDER RANSOM,  
Civil Engineer  
AND  
SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE, 328 Montgomery streets. oc7-3

D. NORCROSS,  
Masonic Temple, No. 6, Post Street.

Military Goods of all Descriptions,  
Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.  
aug 17

WM. H. MEAD, THEODORE VAN TASSEL.  
MEAD & VAN TASSEL,  
HATTERS,  
Montgomery st., cor. of Commercial,  
SAN FRANCISCO.

TO OUR FRIENDS AND THE PUBLIC GENERALLY.  
Having Purchased the entire interest of Messrs FISHER & Co., in this city, we shall, on the 1st day of May assume the management of the

HAT EMPORIUM,  
so long conducted by that firm.

Mr. WILLIAM H. MEAD, for the last seven years Salesman with Messrs Fisher & Co., respectfully solicits a continuance of the patronage so long and liberally bestowed upon the old House, feeling entire confidence in our ability to suit in every particular.

Mr. THEODORE VAN TASSELL, for eight years with Messrs Le Gay & Co., would be pleased to see his friends at his new place of business.

The long practical experience of Messrs Mead & Van Tassel in the Trade justifies them in saying that their work cannot be excelled either in finish or durability. Having perfected arrangements, we shall be in constant receipt, by every steamer of soft goods of the very finest French and American Manufacture.

Our Stock now on hand is superb.  
Call and examine, and judge of the merits of our claim to the title of "LEADERS OF FASHION!"  
Respectfully,

MEAD & VAN TASSELL.  
nov2 Montgomery street, cor. Commercial.

RIEHN, HEMME & CO.,  
ASSAYERS.  
Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.  
Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO  
Messrs. F. PARROT & Co., Messrs ALSOP & Co.,  
R. B SWAIN, Esq., DONOHUE, RALSTON & CO.

CHAS. F. RIEHN, late U. S. Branch Mint, gives Lessons in Assaying, also in Mineralogy and Chemistry as far as required to become a practical Assayer.

G. E. MOORE,  
Assayer and Analytical Chemist,  
No. 612 Sacramento Street,  
HAVING ESTABLISHED A CHEMICAL LABORATORY,  
furnished with every requisite for delicate Analytical work, is prepared to execute the Assay and Analysis of Ores, Mineral Waters, Guanos, etc., with accuracy and dispatch.

REFERENCES:

Prof. J. D. Whitney, State Geologist, San Francisco  
Alsop & Co., San Francisco.  
Suther & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento. sep14

PEOPLE'S  
OPPOSITION  
Steamship Line!

Special Notice.—The Steamers of this Line have been withdrawn from the Nicaragua Route until further notice.

GREAT REDUCTION IN RATES !!

The Fast and Favorite Double Engine Steamship,  
MOSES TAYLOR,  
J. H. BLETHEN.....COMMANDER  
Will be dispatch for PANAMA  
From Mission street Wharf.  
WEDNESDAY, - DECEMBER 23, 1893.

Punctually at 9 o'clock, A. M., on  
Connecting at Aspinwall, by the Panama Railroad, with the Splendid Steamship  
ILLINOIS ----- 2500 Tons.

The Moses Taylor, since her last trip has undergone the most extensive repairs. Her decks have been extended forward and aft; cabins enlarged, refitted and repainted throughout—making her accommodations equal to any Steamer on the ocean.

For further information or Passage, apply to  
I. K. ROBERTS, Agent,  
No. 407 Washington Street, San Francisco,  
Opposite the Post Office.

BOOK KEEPING,  
Penmanship  
AND

COMMERCIAL CALCULATIONS,  
Taught by J. S. LUTY  
PRACTICAL ACCOUNTANT,  
305 Montgomery Street, Corner of Pine.

TO QUARTZ MINERS.

All persons interested in Mining Machinery are invited to call at Donahue's Foundry and examine my improved Amalgamator. It is unquestionably superior to anything now known for amalgamating Silver and Gold. It works 1000 pounds at a time, and will amalgamate over three tons a day. By the motion of the revolving muller, the pulp is drawn through its centre and passes under it, between the grinding surfaces, to the circumference; from whence it passes again over the muller to the centre, through the holes and between the grinding surface to the circumference as before. Thus a constant circulation of the pulp is kept up, bringing the particles of ore again and again under the muller, and reducing the whole mass to an impalpable powder.

No quicksilver lies between the surfaces to be ground, but at the circumference and centre of the pan where the metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in December last, and all persons are again warned against purchasing machines made at the Miners' Foundry called "Wheeler's Amalgamator," as they are an infringement on my patent, and a suit is now pending in the U. S. Circuit Court against the parties infringing. My Amalgamators can be seen running at Donahue's Foundry, where all can judge of their operation and the very superior style in which they are being manufactured.

sep21

THOMAS VARNEY.

PATRONIZE  
HOME MANUFACTURIES!!!

James Longshore,

Trunk and Valise Manufacturer,

307 Sansome Street, under Tehama House. Trunks and Valises, Wholesale and Retail, Fine Sole Leather Trunks, Valises, and a fine assortment of LADIES' TRUNKS constantly on hand. Trunks covered and repaired.

aug x

APARTMENTS.

FURNISHED APARTMENTS, WITH, OR WITHOUT Board, at 1018 Powell Street, between Clay and Washington Street. Persons desirous of a respectable home will do well to apply. jy6

D. MORRIS,  
MACHINE SHOP,  
227 Market, corner of Beale Street.

Manufacturer of

WARRANTED FIRE-PROOF SAFES  
Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. je13

DRAWINGS.—We have highly talented and efficient Draughtsmen, by whom drawings of every description are executed in the best style of art, with promptitude and at a moderate cost.

WANTED

By a competent person, the Secretaryship of four Mining Companies. Books to be kept at the Office of the Mining and Scientific Press, No 67 Government House Inquire as above. oct6



## SILVER MOUNTAIN DISTRICT.

Silver mountain District is situated on the last range of the Sierra Nevadas, near the eastern boundary of Amador county, being about forty-five miles from the Big Trees and sixty-five from Virginia City, N. T. The Big Tree and Carson Valley Road Company are building their road to Silver Mountain District, which will be finished by the first of May next, having only two miles to complete at the Silver Mountain end of the route. This road leads from Stockton, through Murphy's Camp and Big Tree Grove to Silver Mountain, connecting them with the Carson Valley Co's Road which is nearly completed from Markleyville. This will give uninterrupted communication from Stockton to Virginia City by stage, tapping the Monitor, Alpine, Mogul Silver King and Webster Districts on the way. Freight can be brought over this route from Stockton at from  $2\frac{3}{4}$  to 3 cents per lb for eight months in the year.

## SILVER MOUNTAIN

Is the principal town in these Districts, and is situated in a valley lying between two ranges of the Sierra Nevada with a beautiful river running through it, furnishing a supply of water, sufficient to run the largest mills. It would indeed appear, as if Nature had set apart this spot for all the conveniences and facilities of a large mining town. The population during the past summer was from six to eight hundred persons, but at the present time it is considerably reduced in consequence of the road not being finished before winter set in. The town is about one mile in length by half a mile in breadth. The principal business streets are Main and Union which are parallel with the river. There are more in contemplation so soon as a sufficient quantity of lumber can be prepared for building purposes. There are two saw mills in operation which will furnish a sufficient supply in the spring to meet all reasonable demands; at present they are producing lumber at the rate of from 12 to 14,000 per diem. The current price of lumber will be from 30 to \$40 per 1,000 feet, according to quality. There is now being made an excellent quality of brick at from 12 to \$14 per M., and several brick buildings are under contract, and will be completed in the spring. An excellent quality of free-stone is found in abundance in the immediate vicinity of the town, which is well adapted for building. There are two good hotels, and two more are to be erected during the coming spring. The price of board is from 6 to \$10 per week, and good lodgings at from 50 to 75 cts. per night. There are six large stores with extensive stocks of assorted goods, suitable for a mining region; one French restaurant one tin shop and hardware store, one brewery, two laundries, three blacksmiths' shops, three livery stables, and innumerable pioneers of civilization, called whiskey mills, making in all quite a respectable mining town.

## THE MINES.

With regard to the ledges, they are for the most part, large and well defined, and run in a northerly and southerly direction with extensive croppings and fine indications of mineral wealth; they are found in all directions from the town to a distance of four miles and further. On the West side of the town are many claims which were the earliest taken up in the District. The first that may be noticed, is the Mountain claim which crops out largely, very high up on the mountain; the croppings being about 25 feet wide. The owners have run a tunnel over 300 feet and struck a ledge which shows good pay rock; assays have been made as high as \$184 to the ton. A company of capitalists are now in negotiation with the owners, to buy the controlling interest, and if they consummate the purchase, it is their intention to put up a mill and work the claim vigorously the coming season. The Silver Creek Co. which adjoins the Mountain Co. North, have run a tunnel 100 feet, and expect to strike their ledge at about 50 feet more. The St. Charles Silver Prize Co., Mammoth, Geo. Washington, Frank, Big Tree, Chrysal, Baltimore and Uncle Sam are on this range, and have tunnels averaging from 50 to 100 feet. North of the above ledges, and on the eastern side of Silver Creek, is the Mary Frances Co. This Company has a tunnel some 50 feet and will strike their ledge in 50 feet more, with every prospect of obtaining good pay rock.

At the eastern side of the town, is the Scandinavian Canon in which there are some rich claims, the first of which, after leaving the flat is the Alta Co., owned principally by San Francisco capitalists. They have run a tunnel 75 feet

and are close upon the ledge. Immediately adjoining is the Scandinavian Co. with 160 feet of tunnel. Above these are the Gould & Curry, J. C. Fremont, Pine Tree, Buckeye, Extensionado, I. X. L. and Lady Franklin, with many others which have been partially prospected.

As the I. X. L. Co. have struck their ledge and had a ton of the rock worked by different processes in San Francisco, it deserves a brief eulogy. The I. X. L. claim was taken up in the spring of 1862, by J. H. Williams and others, the claim extending 1000 feet. They had tunnelled in about 50 feet, when they struck the ledge  $4\frac{1}{2}$  feet in width. The yield from one ton of the rock, worked by different processes averaged \$200. One piece weighing 20 lbs, worked by the "Varney" process, gave \$627 in gold and silver to the ton. This Company intend to erect a mill in the spring to work their ores. Very little stock in this claim is in the market, being nearly all held by capitalists in San Francisco; the principal of a large English Banking House owning a large interest. The I. X. L. No. 2, is the 1st North Extension of 1500 feet in extent and bids fair to be as good as the original, when prospected. The segregated claim of Treat & Dodge, 100 feet, is the 1st South Extension and the Omega Co's claim of 400 feet is the next adjoining South. This is one of the best locations on the ledge and will be thoroughly opened in the spring. They are sinking a shaft alongside the ledge and at a depth of 50 feet will drive through it, with the expectation of finding very rich rock. More Acron

## A MONSTER BLAST.

The Von Schmidt Gas Company, who have been leveling off a location for their works, on the south portion of the square between 2d and 3d streets, and Townsend street and the Bay, concluded recently to put a monster blast into the hill, near Townsend. This was effected by tunneling about eighty feet into the hill, with a cross-cut of about 40 feet at the innermost point, in the shape of the letter T. In this cross-cut a charge of about  $1\frac{1}{2}$  tons of powder was placed, and fired off about 10 o'clock on Thursday last; the result of which is described as follows in the *Alta*:

"The explosion accomplished all that was expected of it in the way of shattering the cliff, so as to facilitate the work of excavation, and it did even more: it not only blew up the bluff, but very nearly served the inhabitants thereabouts in the same manner. The bluff over the tunnel and chamber was completely shattered, and the rents in the rock even extended so far as to open large cracks in the surface of Townsend street. The report following the explosion was hardly louder than that of an ordinary 12-pounder, but the shock was so severe, that a large amount of damage was done to some of the buildings in the vicinity. The dwellings of Messrs. Rising, Robert, Grant, and Captain Avery, situated on the south side of Townsend street, near third, were all more or less damaged by the cracking of the plastering and throwing down of the ceilings; and the residence of Mr. Divine on the east side of Townsend street, some distance back from the street, was shaken so that the cooking stove in the kitchen, jumped some inches from the floor, if we may credit the statement of an eye witness. Mr. John Grant's house was the most injured, the ceilings being damaged to the extent of nearly, or quite, \$1,000. In the house of Capt. Avery, a small statue was thrown out of a niche in the wall and broken to pieces by the force of the shock. Mr. Grant had intended to have an injunction served upon the company, to prevent the explosion coming off, but, they got the start of him for once."

This, we believe is, with one exception, the heaviest blast ever fired in California. The exception to which we refer was one which took place near Smartsville, in Yuba county, about a year ago. In this blast about twice the amount of powder was employed. A tunnel was run into the hill 190 feet, with a cross-cut of 25 feet, in which the powder was placed and the tunnel tightly closed and packed or "tamped" with earth for the space of about 75 feet from the entrance. When the explosion occurred, the hill for about 300 feet square, from the bed rock to the surface—a distance of about 100 feet—though composed of very hard and compact cement, was thoroughly broken up, and thrown into ridges, very much like mammoth plow furrows. The amount of earth thus loosened would require a stream of 400 inches of water, for over three months, for washing.

FAST STEAMBOATING.—The Daniel Drew, a fast steamer on the Hudson, is said to have recently achieved 16 miles in 36 minutes. This statement is almost incredible.

THE present total revenue of Russia is £44,374,248, of which £18,000,000 is obtained from the tax on brandy. £15,225,111 goes to the army, and £2,941,404 to the navy.

## THE CHICAGO, or "NICHOLSON" PAVEMENT.

MR. EDITOR—I notice in your issue of the 13th instant, the following paragraph in relation to the new wooden pavement, recently introduced into Chicago, and now generally known throughout the north-Western States as the "Nicholson Pavement":

CHICAGO WOOD PAVEMENTS.—The Board of Works in the City of Chicago have given the preference to wood pavements over those of stone, as being the most durable of any kind yet used there. The following is a description of the method of construction: Lay down flooring of one inch board on a bed of sand; coat the floor with asphaltum; stand on end blocks of wood six inches high, by three inches thick, and nine inches in length, in rows about one inch apart, divided by strips of boards. Fill in these open narrow spaces with asphaltum. There are six miles of these pavements in Chicago, which after six years constant wear, are found to be nearly as perfect as when laid down.

As I have for some time been well acquainted with the facts in relation to the introduction and wear of this new pavement, I have thought it might be interesting to many of your readers to learn a few facts in addition to those given in the above paragraph.

Chicago is not only thus, but the city of Milwaukee, Wis., which has ever been noted for its smooth brick pavements, and other cities have commenced laying the Nicholson Pavement. The expense of this paving is less than that of stone—is laid with great rapidity, and for durability, as well as level smoothness, has never been equalled. Carriages move over it with all ease, and without the least jar; the blocks are seldom if ever, torn up, being tightly wedged in with coal and pebbles, upon which hot tar is poured, and then covered with coarse sand or pebbles. The Nicholson pavement is superior to any other, and gains the awarded tribute of excellence of all who know of its superior merits and durability. Western cities have grown disgusted with brick and stone and all the old pavements are being torn up to make way for the new "street floor," the Nicholson pavement. The city of Milwaukee laid, during the last year, three miles of this pavement, and Chicago as much more, and both cities will ere long have no other. Cincinnati and Detroit have contemplated and are making arrangements for the same kind of pavement, through the principle business streets.

LISLE LESTER.

TREASURE SHIPMENT.—From the 1st of December to the present time the amount of treasure shipped from San Francisco to the various ports aggregates \$2,812,858 96. The total amount shipped since Jan. 1, is \$44,111,999 13. The total amount for the corresponding period of last year was \$40,830,182 41, showing an excess in the shipments of this year of \$3,281,816 72 over those of last year.

## MINING SHARE MARKET.

There has been a fair amount of business in the mining share market, during the past week, and prices have generally had a favorable tendency. Encouraging reports from the mines have given new life and activity prevades the market.

Ophir shares have been in considerable demand at fluctuating prices. At the annual meeting held on the 16th inst., the following gentlemen were chosen Directors for the ensuing year: E. Martin, Chas. F. Lott, Joseph Woodworth, A. E. Davis, J. B. Haegin, L. W. Coe and Jesse Holiday. Mr. E. Martin was chosen President, and Mr. Lamb continued Secretary. Mr. W. Palmer, who has had charge of the mine, as Superintendent for the past year, is continued in that position. Many had supposed that the meeting would have been somewhat stormy, but the reports of the President and Superintendent were so satisfactory, that it passed off very harmoniously. The latest accounts from the mine, particularly from the north end, are highly satisfactory. Dividends for the present month have been sold during the past week at from \$37 to \$42 per foot.

Gould & Curry have advanced to \$4,800 cash, and \$4,900 at thirty days. Dividends for December sold early in the week for \$135, but closed freely at \$140 offered, with sellers at \$145. This mine appears to be "giving out" at an alarming rate. It is reported that the amount of bullion taken out at their mill, during the twenty days previous to Dec. 11th, was 9,381 lbs. of amalgam, worth \$225,000. Comment is uncalled for.

Savage shares have declined a trifle, and is quoted at \$2,700, with sellers at \$2,750. But one transaction is noted.



10 Utah, \$39 per share,	ber, \$42½ per foot.
10 Utah, \$37 ¾ share.	10 Baltic, 85 per share b30.
10 Lady B van, 10 per share.	10 Baker, (copper,) \$47
10 Lady Byron, 11 per share.	10 Wilson, (copper,) \$42
4 Melones, 75 per share, b15.	20 Omega, tr. H., \$19.
4 Melones, 80 per share, b30.	50 Ruston Suu, \$10½ b 30
4 Melones, 80 per share—b 15.	80 Bullion, G H, 56 per share, b 8



**MINING AGENCY.**—By reference to our advertising columns it will be seen, that we have made arrangements to obtain special information, through a resident correspondent, with regard to any particular mine at Reese River. Parties in the city about to invest in "feet" in that neighborhood, and not having time or caring to incur the expense of visiting the locality, will do well to avail themselves of the opportunity hereby presented in securing reliable information, previous to investment, at a moderate cost.

Persons already holding "feet" and desirous to learn through a disinterested source the actual condition of the mine in which they may be interested, will do well to embrace the opportunity here presented of securing the desired information.

We shall establish agencies similar to the above in all the principal mining districts, at an early day.

### A New and Valuable Book.

**Process of Silver and Gold Extraction,** by Guido Kustel, Mining Engineer and Metallurgist, former manager of the Ophir Works, &c; 350 pages octavo illustrated.

This admirable work has met with the highest commendations from the Press and Scientific men, as a clear and able exposition of the science as practised in California and Nevada Territory—it is written for the people in good plain English and finely illustrated.

Price—post paid—Cloth \$6; Sheep \$7

A. ROMAN & CO.,  
Booksellers, Importers and Publishers,  
417 and 419 Montgomery street,  
San Francisco.

nov30

SAAC TABOR.

JOHN HILL.

### Tabor & Hill

**Stock Brokers & Real Estate Agents,**

503 Montgomery St., cor. Sacramento,

Buy and Sell Mining Stock on Commission. Are members of the San Francisco Stock & Exchange Board, and of the, San Francisco Board of brokers. nov23

### Giffards Injectors,

FOR SUPPLYING OILERS WITH FERTILE WATER without Pumps No Mill or Mining Company should be without one of these valuable Instruments. Send for a Circular.

DAVID STODDART, Agent,  
je22 Cor. Pine and Front Sts., San Francisco.

### VULCAN IRON WORKS COMPANY,

P. Torquet, Manager,

STEAM ENGINE BUILDERS

and

BOILER MAKERS,

Iron Founders and General Engineers,

No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing Machinery.

Shoes and Dies of the hardest iron.

Russian and Punched Screens.

Steamboat Machinery: Saw, Flour and Sugar Mills.

High and Low Pressure Boilers of all Styles.

JOURNAL and other Turbine Water Wheels with latest improvements.

LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.

Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

THEODOR KALLENBERG

Maker of Models

FOR INVENTORS.

MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel Stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.

No. 415 Market street, San Francisco.

n7.3m) San Francisco.

KUSTEL & DEETKEN'S

METALLURGICAL WORKS,

FOR THE REDUCTION OF

SILVER AND GOLD ORES,

Tailings, Sulphurets, Arseniurets, Etc., Etc.,

Capellation and Refining of Silver and Gold,

Practical Assays for Silver and Gold,

in Small and Large Quantities, by Smelting, Chlorination and Pan Manipulation.

Works—On the San Bruno Road.

Office—No. 605 Montgomery st., San Francisco.

nov 7 tf.

### GENERAL NOTICES.



DR. H. AUSTIN,  
DENTIST,

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (Indian Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. je-29

### DESKS

AND

Office Furniture,

OF ALL KINDS.....FOR SALE BY

JOHN WIGMORE,

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all Kinds, attended to.

### SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL.

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

FREDERICK MANSELL,  
MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,

No. 422 California street, corner of Leidsdorff.

Drawings of MODELS made for parties applying for patents at Washington or London. mar23 2m

El Paso District, Los Angeles County,

MINING AGENCY.

C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

LETTERS OF EXCHANGE, containing Revenue or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to.

The subscriber has a carefully prepared map, (and specimens,) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to J. Barnett, Esq., 435 Davis St., San Francisco Cal.

El Paso, June 21, 1863. C. W. TAPPAN.

au31

R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,

or

JOB TURNING & SCROLL SAWING.

BRACKETS,

RED WOOD BALUSTERS,

NEWEL AND CEDAR BALUSTERS

for Stairs.

Manufacturers of every description of Oval,

Circular and Square

PICTURE & LOOKING GLASS FRAMES

For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS. H. C. SOMES

### MINING LAWS AND FORMS

JUST PUBLISHED BY H. H. BANCROFT

J & CO., being a compilation of the Statutes of this State relating to Mining Corporations, Associations, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. sept4

H. C. KIBBE,

MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

### GENERAL NOTICES.

### New Patent Agency.

WE HAVE CONNECTED WITH THE

Publication of the "MINING AND SCIENTIFIC PRESS"

The Patent Agency Business,

And would invite Inventors and Discoverers on the Pacific coast, who wish Dispatch as well as Economy to call upon us. We have an Experienced Agent at Washington, which, together with our own experience of several years, renders the

Mining and Scientific Press Agency

The most desirable place to make application for Letters

Patent on the Pacific coast. Apply at

Office of the "Mining and Scientific Press," Room

No. 57, Government House, corner of Washington and

Sansome streets, San Francisco. EWER & SMITH.

FOREIGN PATENTS OBTAINED

By application at this office, Room 57 Government House.

EWER & SMITH, Solicitors.

### NOTICE TO INVENTORS.

Inventors wishing to file Caveats should apply at this Office, Room No. 57, Government House. Terms moderate. EWER & SMITH.

### PATENT RIGHTS.

Patent Rights Bought and Sold, At the office of the "Mining and Scientific Press," Agency EWER & SMITH.

### IMPORTANT TO INVENTORS.

Inventors who obtain their Patents through this Office can have their Inventions illustrated and described in the columns of this paper FREE of charge, they merely furnishing the engravings. We are also prepared to furnish engravings at reasonable rates. Those who do not care to go to the expense of having engravings prepared can have their inventions fully noticed and described in our columns, free of charge. The free use of our columns to aid them in introducing their inventions to the public will be found a most important advantage to inventor. EWER & SMITH.

### WHEELER'S

Amalgamating and Separating Pans.

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to follow the triturating this loss is entirely avoided. In working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* These Pans may be seen in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. nol6-tf

ZENAS WHEELER.

Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

Staple and Fancy Dry Goods,

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

NATHANIEL GRAY,

General Furnishing Undertaker,

641 Sacramento st., Cor. of Web b

SAN FRANCISCO.

GEO. A. MPTCALF.

D. S. HUTCHINSON.

METCALF & HUTCHINSON'S

PHOTOGRAPHIC GALLERY,

650 Washington st. Three doors below

Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Picture, at a lower price than ever before offered in the city.

### CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

\$3. Per Dozen!

Large sized Photographs \$3—Extra copies \$1 each.

AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

### HOTELS.

### International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

FIRE-PROOF BRICK BUILDING.

Most convenient to the

Steamer's Landing, Business sts. & Places of Amusement

OPEN ALL NIGHT.

City Railroad Cars Pass the Door.

REDUCTION IN PRICES.

Fine Bathing Rooms attached to the Barber Shop Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring Bed and Hair mattresses. The International offers to guests the greatest number and

BEST FURNISHED FAMILY ROOMS;

and sets as good a TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

### Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE, FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles, WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL. F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurbished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

### THE RAILROAD HOUSE.

Nos. 318 and 320 Commercial & Clay Sts.,

SAN FRANCISCO.

H. T. FELTON,..... PROPRIETOR.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit two times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House Free of Charge.

The House is open all night.

### P. M. S. C O.

PACIFIC MAIL STEAMSHIP COMPANY'S line to PANAMA, connecting via the Panama Railroad with the steamers of the Atlantic and Pacific Steamship Company at Aspinwall.

FOR PANAMA.

The following Steamships will be dispatched in the month of November, 1863.

Dec. 3d - - - - Steamer Orizaba.

Dec. 13th, - - - - Steamer Golden City.

Dec. 23d - - - - Steamer St. Louis.

Will leave Folsom Street Wharf, with Passengers and Treasure, for Panama

AT 9 O'CLOCK, A. M., PUNCTUALLY,

And connect, via Panama Railroad, at Aspinwall, with

teamships for New York.

For Freight or passage, apply to

A. B. FORBES, Agent.

je4 Corner of Sacramento and Leidsdorff sts



FOUNDRIES & MACHINE SHOPS.

PORTLAND BOILER WORKS.

MOYNIHAN & AITKEN,

Boiler Makers & Sheet Iron Workers,

Mission, between Beal & Fremont Sts,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron Work executed at the shortest notice, and on the most reasonable terms.  
Jy 29

PUMPS!

HARRISON'S

California Lift and Force Pump,

WITHOUT VALVES OR PACKING.

Suitable for Mines, Fire Engines, Wrecking or Irrigating. This is the cheapest, lightest and most durable, and least liable to get out of order, of any Pump yet invented.

ALL SIZES;

Capable of throwing from ONE HUNDRED TO FIVE THOUSAND Gallons per Minute—For sale by

C. H. HARRISON,

PHOENIX OIL WORKS,

10-16 517 Front Street, San Francisco.

50 lbs. MARINE and  
Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels, from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.  
For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

35 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil: if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,  
G. T. FOURQRE, Superintendent.

WORKS, North Beach; Office, 500 Sacramento st., San Francisco.

HEPBURN & PETERSON'S  
AMALGAMATOR.

The subscribers would call the attention of the Mining Public to their Reducer and Amalgamator, and also to their Separator for reducing and separating the minerals from

GOLD AND SILVER ORES,

manufactured and exhibited at the Vulcan Iron Works, Nos 137 and 139 First Street, San Francisco.

These machines secure to the miner a more expeditious and perfect Reduction and Amalgamation, a less liability to accident and delay, and a greater amount of useful effect in proportion to the power employed to keep them in operation than any other machines now in use for producing similar results. This fact is attested to by their general adoption and preference at all the principal Reduction Works in Nevada Territory; among which may be mentioned the Gould & Curry Mill, the Silver State Reduction Works, Yehyr Flat Mill, Pioneer Mill, Eastern Slope Mill, Phoenix Mill, etc.  
Nov 8 3m

HEPBURN & PETERSON.

SOUTH PARK

Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO.,  
Office at the Mill, South Beach and Third St.  
Jc13 W. R. WATERS Secretary.

W. W. HANSCOM,

Steam and Mechanical Engineer,  
Designs furnished, and Drawings made for Engines, Mills, Water Wheels, Mining Machinery, etc., etc. Agent for MacKenzie's Patent Cupolo and Blower.

At Golden State Iron Works,  
aug x First Street, San Francisco.

PATENT CLAIMS.—We will furnish, on application, the claim of any invention that has been patented within the last fourteen years. The name of the patentee—date of patent, when known, and two dollars for copying should be sent.

MODELS.—Inventors will please attach to all models sent to us, their names and address, in a legible, permanent form, this will avoid confusion and prevent errors.

PALMER, HANSCOM & CO.,

GOLDEN STATE IRON WORKS,

No. 19, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIES.

PALMER, HANSCOMB & CO.

To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be otherwise lost. Made exclusively by

PALMER, HANSCOM & CO.,  
GOLDEN STATE IRON WORKS,  
Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest, False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent.  
W. A. PALMER.

Miners' Foundry

—AND—

MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS Machinery, the Best and Most Economical, manufactured in the State of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as: Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Rotors, Etc., Etc.

Particular attention will be given to the manufacture of Machinery in Sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere.  
HOWLAND, ANGEL & KING  
San Francisco, February 23, 1863.

REYNOLDS'

Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

127 of these Invaluable Machines,

ARE NOW IN USE

in California and Nevada Territory, giving a perfectly regular motion and

Saving 20 to 65 per cent of the Fuel.

Steen's Improved Governor

Is the CHEAPEST, SIMPLEST and QUICKEST to set and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the common ratchet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

Felt for Steam Boilers, Pipes, Etc.

At the lowest market rates.

E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

cluding all that relates to mines and mineral products of economical value; the fourth, the botany and zoology, and the fifth would contain such maps, sections and other illustrations as were not introduced into the other volumes, or printed with the text. It is possible, however, that some of these volumes might have to be divided into two parts, owing to the large quantity of matter it might be desirable to publish. \* \* \* The appropriation for the survey made for the second year of its continuance by the Legislature of 1862 having just been paid, a volume is now due the State. The work has already been begun and will be carried on as rapidly as possible, provided the Board of Examiners will audit my estimates for the printing, to the extent authorized by the law, so that I can make the necessary financial arrangements and be enabled to pay for the work as it progresses by borrowing on the security of the State warrant. \* \* \* The printing of another volume of the report can be commenced whenever an appropriation is made for the same by the Legislature and the money provided for the purpose.

IMPORTANT TO MINERS.—The Supreme Court of California has just settled an important point concerning the right of locators of mining claims, and as the same state of circumstances is very likely to again arise, we publish the decision as we find it in the San Francisco Journal:—

Coleman et al. vs. Clements et al. is the title of a case wherein our Supreme Court settles some points which it is important to know. In February, 1861, three persons, in the name of themselves and twenty-seven others, some of whom knew nothing of the use made of their names, or of the intention to do so, took up and marked out a copper claim of 4,500 feet. Afterwards, in June, 1861, twenty-three of the original locators, with seven others, formed a new company and relocated the same ground, claiming that the original location had been abandoned by the failure of the seven left out of the new organization, to perform, as the mining law required "one day's work on each claim every thirty days from the 1st of May until the 1st of December in each year." Five of the seven thus left out in the cold, brought suit to recover five-thirtieths of the claim, and the cause having been appealed to the Supreme Court, that tribunal decides as follows:

That the claim is a joint one—that is, 4,500 feet, located in the joint names of thirty persons, and there is no location of any distinct portion thereof in the name of any one of them; that it was therefore impossible for each locator to do a day's work on his own claim, and the law quoted, must not, in the absence of express terms, be construed as requiring him to do so; that in cases of forfeiture, terms are to be construed strictly, and here the word "claim," which properly includes all kinds of claims, joint as well as separate, means a claim held by individuals jointly, just as it does a claim owned or held by one person. And one day's work, that is, the labor of one man bestowed on a mere individual claim. On the point of adverse possession set up by defendants, the Court says that to make such possession available against a co-tenant, there must be an intent on the part of the tenant in possession to hold adversely, and such intent must be indicated by acts calculated to exclude complainants from all participation as tenants in common. The possession of one tenant in common is presumed to be the possession of all, and this possession is not overturned by the mere fact that the one in possession does not recognize his co-tenant. The judgement given in the Court below, in favor of complainants, is therefore affirmed."

The last idea of Paris, says one of the correspondents of the daily journals, is a plan in alto-relievo of the whole of Europe, not in maps or models, but actually raised out of the ground. A garden is to be set aside for the modeller, who, taking Mont Blank, fifteen feet high, as his point de depart, is to raise in just proportion around in the rest of Europe, pour the seas into their proper places, and intersect the whole with roads, canals, railways, and telegraphs. A steam engine is to act the part of the moon, and regulate the tides.

GEOLOGICAL SURVEY.

According to the Report of the State Geologist, he is steadily and industriously prosecuting his important and interesting labors. In it he indicates what is necessary to be done in order to continue the survey, and to perfect what has already been done. The contributions to science, and the immediate and prospective advantages to our State, which it is believed will follow a publication of the forthcoming volumes, will prove the wisdom of creating the office of State Geologist and of continuing its existence.

There are only three counties in the State in which some work has not been done by the survey, and those are Klamath, Humboldt and Mendocino counties, in which Indian difficulties have hitherto rendered it almost impossible for the small party to operate to any advantage, or without considerable risk.

Mr. Whitney says: "It seems proper, at the present stage of the survey, to make some statement in regard to the probable amount of time and money required to complete the work. Indeed, in my address before the last Legislature, I promised to do so during the coming winter. It is especially necessary that some action should be taken soon in reference to this matter, as the amount and character of the printing to be done this winter will depend on the settlement of the question whether the survey is to be continued; if so, for what probable length of time.

Undoubtedly, were the State in a position in which economy in the public expenditures was not of the highest importance, there would be no question that the survey might be continued to an indefinite period with advantage, since all will admit that the results proposed to be gained by a work of this kind, if it be properly conducted, could not fail to be beneficial to the community. Thus, no one in California objects to the minute accuracy and consequent expense of the coast survey work upon our shores, since the burden of payment does not fall directly on our shoulders. \* \* \* The farthest limit of completeness to which I ever aspired to carry this survey was the completion of a map of the whole State on a scale of six miles to the inch, making nine sheets, each about three feet square, with the geology worked out on a corresponding scale of accuracy. Further experience in the State, and more knowledge of what the people expect, and a personal experience of the condition of the treasury, have convinced me of the impossibility of carrying out this undertaking, for which certainly not less than fifteen years will be required. I am fully convinced that the work, carried to this extent of completeness, would be of sufficient benefit to the State to justify its being done; but I am also equally well assured, in my own mind, that the people would not recognize the value of the survey until after it was completed, and that, consequently, it would be impossible to carry it forward on a matured plan without danger, and almost certainty, of its being interrupted.

In weighing the matter carefully, I have concluded that four years longer is the extent of time to which the survey should be protracted, with a liberal appropriation—of not less than \$40,000 per year. But I am, furthermore, of opinion that the survey should be suspended altogether, until such time as the finances of the State are placed on a cash basis, as I find that the delay and anxiety caused by the necessity of borrowing to meet the advances required by the treasury' from one two years behind hand in the payment of the appropriations, is too disagreeable and prejudicial to the interests of the State and the progress of the work to allow me to be willing to continue on the system any longer. \* \* \* The result of the survey, in case it should be actively continued for four years longer, would probably be comprised in about five large volumes, of which the first would embrace the physical geography and general geology of the State; the second, the description of the fossils found in our rocks, both those of animal and vegetable origin; the third, the economical geology, in-



## CROCKER'S

## STOCK and ASSESSMENT LEDGER.

Copyright Secured—Price \$10.

The necessity of a proper book for keeping the Stock and Assessment accounts of Corporations has long been very much needed. One that would combine economy and simplicity, and would not require the services of an experienced book-keeper to keep the accounts correctly. CROCKER'S STOCK and ASSESSMENT LEDGER has met this requirement; we have submitted it to several Secretaries of corporations, and they acknowledge that the plan is admirable, and just what has long been wanted. The printed headings are a perfect explanation of the manner of keeping it, and any person, whether they understand book-keeping or not, cannot make an error in the accounts. The Stock and Assessment accounts are so arranged that the Secretary can at a moment tell how any stockholder's account stands, both in regard to Stock and Assessments. He can also, with the greatest ease, trace any certificate, through any number of transfers, to the original one issued. It saves a great amount of labor, as it does not require one fourth the writing of the ordinary method. It dispenses entirely with the old style of Stock Ledger, Stock Journal and Assessment Book, all three of which Secretaries have heretofore been obliged to keep, condensing the whole in one book. To a Secretary who is Secretary of several companies, this book will prove a valuable one, as we feel no hesitation in guaranteeing satisfaction to those who may order them. Send men sheets sent to those who desire to examine it. The books are ruled with one or two accounts to the page. State which is preferred.

Published and for sale, wholesale and retail, by  
**H. S. CROCKER & CO.,**  
Book and Job Printers, Sacramento.

## Certificates!

And complete sets of books for Corporations, in the finest style, at short notice, and low rates. 7-1m

## MINING NOTICES.

**Enterprise Copper Mining Company.**—Office 528 Montgomery street, San Francisco. At a meeting of the Board of Trustees of this company, held December 12th, an assessment of ten cents per share was levied, payable immediately, and another assessment of eight cents per share, payable January 1st, 1864, and another assessment of eight cents per share payable February 1st, 1864, all payable in U. S. gold coin, to Thomas S. Levy, the Treasurer, at Lincoln, Placer county, or to the Secretary, at the office of the Company.  
By order of the Board of Trustees,  
7-1 feb1 M. G. ELMORE, Secretary.

**Wide West Copper Mining Company.** Office 528 Montgomery street, San Francisco, December 12, 1863. Notice is hereby given that assessment No. 2 of twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, payable in U. S. gold coin, to the Secretary at the office of the Company, or to J. M. PIKE, Superintendent, Copopolis.  
By order of the Board of Trustees,  
7-1m M. G. ELMORE, Sec.

**Emmett Copper Mining Company.**—Notice is hereby given that at a meeting of the Board of Trustees of the Emmett Copper Mining Company, held at their office, No. 528 Montgomery street, San Francisco, December 8, 1863, an assessment of twenty-five cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to L. HONIGSBERGER, Copopolis.  
By order of the Board of Trustees,  
6-1m M. G. ELMORE, Secretary.

**Mammoth Consolidated Gold & Silver Mining Co.,** Excelsior District, N. T.—Office 618 Montgomery St., San Francisco, Nov. 28, 1863. Notice is hereby given: there will be sold at Public Auction, at the office of the Company, in San Francisco, on Saturday January 9th, 1864 at 12 o'clock, M. of that day, to the highest bidder, for cash in U. S. gold coin, so many Shares of the Capital Stock of said Company standing in the names of the following shareholders as well as necessary to pay assessment No. 1, of ten (10) cents per share, duly levied thereon by the Board of Trustees on the 9th of May, 1863; also assessment No. 2, of thirty (30) cents per share, duly levied thereon by the Board of Trustees on the 27th of June, 1863, together with all the expenses of advertising and sale, unless said assessments are previously paid to M. G. Elmore, Sec., San Francisco, or to W. H. Dunlap, Financial Sec., Aurora. Names No. Cert., No. Ass't., Shares, Am't.  
M. J. Brown.....6 & 7 2 25 \$7 50  
J. B. Best.....74 343 1 2 200 115 00  
G. W. Baily.....344 1 2 200 80 00  
G. C. Chism.....33 to 37 incl 2 100 30 00  
J. C. Coddington.....358 1 2 56 1/2 32 50  
D. C. Crocker.....334 1 2 250 100 00  
T. A. Cutter.....25 393 to 403 incl 2 125 37 50  
J. R. Duddleston.....27 28 1 2 50 20 00  
U. B. Frazier.....50 to 57 incl 1 2 200 80 00  
W. H. Garland.....450 451 2 275 82 50  
D. H. Haskell.....65 to 69 incl 1 2 50 20 00  
W. A. Holt.....70 71 72 2 25 7 50  
James Jaques.....333 1 2 250 100 00  
R. P. Johnson.....443 2 100 30 00  
A. B. Kelly.....275 to 281 incl 2 100 30 00  
E. J. Latham { 253 284 285 } 2 60 16 93  
J. H. Mathews.....342 2 200 60 00  
W. H. Mason.....362 2 13 3 00  
John Patten 416 417 2 16 4 50  
Geo Raymond { 126 to 131 incl } 2 125 37 50  
{ 136 to 142 incl } 2 13 3 00  
G. H. Rogers.....143 to 151 incl 2 200 60 00  
J. S. Shultz.....61 487 1 2 95 38 00  
G. D. Myers.....360 1 2 5 2 00  
A. S. Sorensen.....118 to 124 incl 1 2 100 40 00  
W. J. Smith.....191 191 2 2 75 20 00  
H. S. Van Dine.....218 338 1 2 175 68 75  
H. Watson.....263 to 267 incl 2 25 7 50  
W. J. Veron.....229 130 231 2 40 10 80  
{ 241 242 }  
By order of Board of Trustees,  
M. G. ELMORE, Secretary.

## ASSAYS!

Promptness and Accuracy Secured  
BY THE USE OF THE MOST IMPROVED  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,** (From Europe.)  
24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. jly6  
"HINTS FOR PROSPECTORS" Free by Post.

## Mining Shares For Sale

BY  
**C. A. CRANE,**

Office 28 Government Block.

475 Shares U. S. Mining Company, Virginia City.  
910 Shares Granada Gold and Silver Mining Company  
Virginia H. I., Virginia City.  
168 Shares Evoca Consolidated Copper Mining Com-  
pany, Crescent City, Cal.  
20 Shares Mohave Mining Company, La Paz District,  
Colorado, N. M.  
30 Shares Aspiavall Gold and Silver Mining Company,  
Devil's Gate District, N. T.  
75 Shares Washington Copper Mining Company, Indian  
Bar, Tuolumne Co.  
228 Shares Montezuma Gold and Silver Mining Com-  
pany, Inyo District, Tulare Co.  
90 Shares Owen's County Consolidated Gold and Silver  
Mining Company, Inyo District, Tulare Co.  
50 Shares Crown Point Ravine Gold and Silver Mining  
Company, Virginia District, N. T.  
10 Shares Triunfo Gold and Silver Mining Company,  
San Antonio District, Lower California. sep28

## N. LOMBARD INGOLS.

## Accountant and Mining Secretary,

No. 10 GOVERNMENT HOUSE, Cor. Washington & Sanson Sts.

## OFFICE OF THE

**Santa Cruz Petroleum Oil Works Co.,**  
**Gum Silver Mining Co.,** (Reese River, N. T.)  
**Laurel G & S Mining Co.,** Copala, Sinaloa, Mex.

N. B. Mr. Ingols will pay particular attention to the adjustment of complicated accounts, Commercial and Incorporated Companies' Books, to drawing up commercial writings and to Engraving legal or other documents with neatness and dispatch. An experience of more than twenty-five years in every branch of his profession is a guarantee of his practical and thorough acquaintance with its duties. He has the privilege of referring to some of the leading mercantile houses and legal practitioners on the Atlantic and Pacific sides, for testimony of his business and clerical abilities.

**Heyer Bros.,** 76 and 78 Federal Street, BOSTON.  
**Heyer Bros.,** 406 Battery Street SAN FRANCISCO.

## HEYER &amp; CO.,

IMPORTERS OF  
AMERICAN AND EUROPEAN

Fancy Goods, Toys & Musical Instru-  
ments; also,

COATS, PERFUMERY, HAIR AND TOOTH BRUSHES,  
Port Folios, Portemonnaies, Ladies' Bags, Photograph  
Albums, Cutlery, Willow and Parian Ware, Children's  
Carriages, etc. Our Stock of Violin, Guitar and other  
Strings is very large. Our Foreign Goods are selected by  
one of the firm, and the American by the Boston  
House (established 1824.) We have the Sole Agency for

**Hallet & Davis' Boston Pianos,**  
**Smith & Bros' Harmoniums, and**  
**Treat & Linsley's Melodeons.**

The Hallet & Davis Pianos are each supplied with their  
Patent Suspension Bridge, which is a decided improvement.  
It gives a full and clear vibration in the upper  
octaves, producing a quality of tone unequalled in in-  
struments of the best quality, and warranted to give satisfaction. 3m

## AGENTS WANTED.

We want a good Agent in every city, town and settle-  
ment, on this Coast. Applicants will send their names  
with reference, when specimen numbers of the **Min-  
ing & Scientific Press** will be forwarded to them,  
and their names added to our published "List of Agents."  
EWEK & SMITH.

## Owens River Canal Company.

## FOR SALE,

FOR ACCOUNT OF THE COMPANY, 7,000 SHARES OF  
the above stock, at \$1 per share. It is obviously  
presented to the public as the best investment, for the  
price, now offered in this market.  
Office of the Company No. 328 Montgomery street.

## REMOVAL.

**OFFICE OF THE PACIFIC METAL**  
largest Office is removed to 509 Sacramento street  
Having enlarged our Works at North Beach, we are  
now enabled to reduce from 10 to 15 tons of Silver or  
Gold creek per day.  
Gold and Silver ore, and Sulphuret Assayers', or Sil-  
vermiths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in  
cash, for shipments. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sanson Co.

## MINING CARDS.

## OWEN'S RIVER CANAL COMPANY.

Capital Stock ..... \$1,000,000.

10,000 Shares ..... \$100 per Share.

A Portion of this Stock is no offered to  
the public, and recommended as an investment.

**FULL PAID AND UNASSESSABLE**  
Stock, also Assessable Stock, can be obtained of A. J  
DOWNER & CO., the authorized Agents of the Company.  
406 Montgomery street.

President.....R. S. WHIGHAM.  
Secretary.....W. FISK HICHOCK.  
Treasurer.....MONTGOMERY COBLEY.  
Superintendent.....WILLIAM FLEMING.  
Engineer.....J. E. CLAYTON.

TRUSTEES:  
R. S. WHIGHAM, formerly of Whigham's Mill, Nevada  
City.  
WILLIAM FLEMING.....of San Francisco.  
SPEIR RIDDELL.....Paying Teller of Parrott & Co's.  
ISAAC SVAIN.....of A. J. Downer & Co.  
WILLIAM P. PRATT.....of Nash & Fogg.  
Office of Company 328 Montgomery street  
28sep

JOHN ARMSTRONG. WM. P. WILDER.

## ARMSTRONG &amp; WILDER,

VIRGINIA CITY, N. T.,

SEARCHERS OF RECORDS  
for Mining Claims & Real Estate.

RELIABLE ABSTRACTS  
guaranteed at reasonable prices.

LETTERS OF ENQUIRY  
promptly answered.

ALEXANDER STOTT,  
MINING SECRETARY,  
512 Sansome Street, San Francisco.

## Secretary of—

HORSE SHOE, Silver and Copper, Monte Diablo.  
DANIEL WEBSTER, Gold and silver, Devil's Gate.  
GENERAL JACKSON, Gold and Silver, Devil's Gate.  
FIGARO, Gold and Silver, Alpine District. au10

## T. C. Sanborn &amp; Co.

STOCK BROKERS,

No. 630, MONTGOMERY STREET.

## OPHIR SILVER MINING STOCK,

GOULD & CURRY MINING STOCK,  
CHOLLAR MINING STOCK,  
CALIFORNIA STEAM NAVIGATION CO'S STOCK,  
BOUGHT & SOLD.

## NEW MINING AGENCY.

WE HAVE MADE ARRANGEMENTS WITH A SPE-  
cial Correspondent at Austin, Reese River, by  
which any information attainable with regard to any  
particular mine in that locality can be obtained, for the  
Private Benefit of Parties

in this City or elsewhere. Our correspondent will visit  
any mine which may be designated and report upon the  
general characteristics and condition of it, the cause,  
amount of work which may have been done, etc. A rea-  
sonable fee will be required for such service. For fur-  
ther information apply at this Office.

EVER & SMITH.

## L. F. LELAND,

## STOCK BROKER,

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2 1/2 to 3 1/2, P. M.  
Member of the San Francisco Stock and Exchange Board  
je-29

## AGENCY

For the Purchase and Sale of

## MEXICAN MINING STOCKS

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA AND LA MARRONENA SIL-  
ver Mining Companies, San Antonio District, Lower  
California.

All persons are invited to call and examine Ores from  
the above mines.  
je13

WM. FAULKNER.

## New Bedford Copper Company.

THE UNDERSIGNED HAVING BEEN APPOINTED  
Agents for the above Company, are receiving reg-  
ular supplies of their superior manufactures of

SHEATHING COPPER;  
BRAZIER'S COPPER;  
COPPER BOLTS;  
YELLOW SHEATHING METAL;  
COPPER AND COMPOSITION NAILS;

Which they offer to the Trade at the lowest market  
rate, and on the most favorable terms.  
je-29

MORGAN, STONE & Co  
108 Front Street, San Francisco.

## BUSINESS CARDS.

## A. C. MORSE,

Mining and Real Estate Agent,

Office—S. W. corner Pine and Silver sts., Aurora.

**HAVING MADE ARRANGEMENTS**  
with MIXER S. MARTIN ESQ., one of the principal  
Stock Brokers of San Francisco, I am prepared to BUY  
and SELL every description of Mining Stocks in Esme-  
ralda District

## GOLDEN AGE G. &amp; S. MINING CO.,

Austin, Reese River.

OFFICE, 57 Government House.

WM. POOLER, SECY.

## Fire Hose! Fire Hose!! Fire Hose!!!

J. P. D. WILKINS,

The celebrated HARNESSE MAKER of Stockton, makes  
Fire Hoses, from the best material, and WARRANTED at  
a trial of the Weber Steam Engine Co., No 3. of the city  
of Stockton. This Hose is manufactured at its establish-  
ment, and known to stand a pressure of 125 pounds to the  
square inch; as certified by the Chief Engineer.

## ALSO FOR SALE,

All kinds of HARNESSE and SADDLERY, at the lowest cash  
prices. REPAIRING done promptly, one door west of the  
Main Street Stable. oct12

## WANTED,

GOLD QUARTZ SUITABLE FOR  
CUTTING JEWELRY,

By FRONTIER A. DEVIERCY,

au3f 437 Pine street, San Francisco.

## The Pacific Mineral Company

MAKE LIBERAL ADVANCES UPON THE ORES OF  
COPPER, SILVER, TIN, NICKEL, COBALT, ZINC,  
LEAD, AND SUCH OTHERS CONTAINING GOLD.  
Due account taken of all valuable metals combined  
with Silver and Copper Ores, and advances made there-  
for.

Parties owning undeveloped mines and desiring capital  
to prospect the same will receive assistance, if, upon ex-  
amination, such leads are deemed sufficiently valuable  
to justify such expenditure.

OFFICE, No. 1, OLD FELLOWS' HALL,

je1-1f Montgomery Street, San Francisco.

## MARTIN &amp; Co.,

OFFICE—224 Montgomery Street, Up Stairs,

WILL CONTRACT FOR THE

## Purchase of Copper Ores,

Assaying 8 per cent and upwards of Copper to the Ton.

We will make ADVANCES upon Ores of COPPER, TIN  
and NICKEL.  
Sacks will be furnished and Freight Paid on all con-  
signments if desired by the consignors.

HENRY MARTIN,

New York.

J. F. GREENMAN,

San Francisco.

San Francisco Post Office, Box 1269.

je 1.

## NORTH BEACH QUARTZ MILL

and  
REDUCTION WORKS

Are prepared to work Gold and Silver ores, in large or  
small quantities.

Working assays made of small lots, and all kinds o  
ores crushed at short notice.

Our new and complete Machinery, will enable us to  
give results fully up to the merits of rock.

WHEELER & THAYER, Proprietors.

C. C. JONES, Amalgamator

San Francisco, Oct. 13, 1863.

JOHN P. Gallagher.....JOSEPH H. WEED.

## GALLAGHER &amp; WEED,

## BRASS &amp; BELL FOUNDRY

## AND

## LOCK FACTORY.

No. 125 First Street, opposite Minna, next door to Pacific  
Foundry, all kinds of

Brass and Composition Castings and  
Finishing, done with neatness and  
dispatch.

CHURCH and STEAMBOAT BELLS, OF ALL SIZES  
Made to order. Engines & Gongs made and hung  
in the best manner. Bank, Vault, Store and Prison  
Locks, also brass Padlocks and Shop Locks of various  
patterns, on hand and made to order.

Particular attention given to casting Rudder Braces  
and Ship Work in general.

All Jobs promptly attended to.—Prices  
moderate.

Removed from Oregon street, between Front and Davis.





A JOURNAL OF MINING, MANUFACTURES, SCIENCE, ART, CHEMISTRY, INVENTIONS, ETC.

VOL. VII. SAN FRANCISCO, SATURDAY EVENING, DECEMBER 27, 1863. NO. 9.

**ENLARGEMENT**  
—AND—  
**Important Improvement**  
—OF THE—  
**MINING AND SCIENTIFIC PRESS.**

Enlarged from Eight to Sixteen Pages at the Commencement of Volume VII, January 1st, 1864.

TWO VOLUMES (OF 416 PAGES EACH) PER ANNUM.

PUBLISHED EVERY SATURDAY.

**SUBSCRIPTION TERMS IN ADVANCE:**

One Volume, six months,.....\$3.00  
Two Volumes, one year,.....5.00  
Five Copies, one year,.....20.00

The present proprietors of this journal announce with confidence their determination to render to the friends of Science, Mining and Mechanical Industry a newspaper published upon this coast worthy of their patronage at home and their pride abroad. We shall seek favors only through our endeavors to merit them.

**Illustrative Drawings and Engravings**

Superior in finish and useful and attractive in character, will be published from time to time, representing the most important new inventions and improvements in the art and science of

**Mining and Mechanism**

Developed upon this Coast. Each number of the paper will contain full and correct reports of

Sales by the Stock Boards of San Francisco.

Sales by the Stock Board of Virginia City.

Sales by the Stock Board of Esmeralda.

Sales by all Mining Stock Boards.

Reports of Bids and Sales in San Francisco.

Reports of Bids and Sales in the Territory.

A Weekly Review of the Stock Markets.

A Weekly Review of General Mining Interests.

General Summary of California Mining News.

General Summary of Mining everywhere.

**Valuable Information for all Miners.**

Indispensable Knowledge for practical workmen.

Practical Suggestions for intelligent artisans.

**Valuable Facts and Statistics**

Essential to members of all trades and professions; the best approved methods of mining; the latest discoveries and inventions in mining operations; practical, scientific views upon geological and mineralogical questions; the proper methods of reducing ores and saving the precious metals. In fact every sentence calculated to lessen the number of hard blows uselessly rendered by miners and working men, and add wealth by intelligent saving of material or labor, will find welcome space in our columns. The paper will afford many

**Practical Hints**

With regard to the manner of working and securing mines, derived from the actual experience of parties in our own and other countries. Also hints concerning the location and possession of mining grounds; the laws peculiar to different districts and countries; and notices of all important decisions of the law in mining cases. As a

**Book of Reference**

The bound volumes of the Press will find no rival in value to the intelligent and industrious citizens of the Pacific Coast, who cannot but feel a source of pride in the history of the inventions, discoveries and prosperous developments of the remarkable era through which we are now passing.

**The Stock Record**

As presented in our columns will be found correct, distinct and most convenient for preservation and future reference.

**For Sending Abroad.**

As a paper for mailing regularly to your friends in the East, or to correspondents elsewhere, none can be selected more appropriate, or better calculated to dispense reliable information with regard to transpiring events on this coast and the progress of California.

Friends pleased with our success in the publication of the Press can render us essential aid by furnishing correspondence and all important information which may come under their observation, and by calling the attention of their neighbors to the commendable features of the paper; the appreciation of which favors will be duly manifested by the constant improvement of our journal.

**DEWEY & CO., Publishers.**

Office in Government House, Nos. 56 and 57, corner of Washington and Sansome streets, San Francisco.

**THE MINERS' LABORATORY;**  
A COLLECTION OF  
**IMPORTANT AND VALUABLE INFORMATION**  
FOR THE BENEFIT OF  
**Miners and Prospectors.**

**THE SCIENCE OF MINERALOGY.**

During the past few months we have been publishing a series of articles under the above head, in which we have endeavored to collect such information as shall be of practical value to the miner and prospector, in their labors and explorations in the field. The early numbers, which treated upon copper, having been long out of print, it has been suggested by many of our recent subscribers, that we should reprint them for their benefit, and for the benefit of many of our old subscribers, who desire to have them collected into a single number. In accordance with these suggestions, we give, in the present issue, so much of said papers as are of any special value. We shall still continue our Laboratory articles, and endeavor to render them, more than ever, an interesting and important feature of our journal.

The primary object of the science of mineralogy is the development of mineral bodies; a knowledge of their characters, forms and combinations; also the circumstances and conditions in which they are found, and the substances with which they are combined. This is the practical object of mineralogy and the point upon which we propose to treat principally in these papers.

A development of the nature of minerals, a knowledge of their elements, their properties and uses, constitutes the economical portion of the science, which though highly interesting and useful to mankind, is not a matter which we propose to discuss to any extent. The miner is directly interested only in the development—the bringing to the surface—of the minerals of the earth; their economy and general introduction into the various channels of business, he leaves to those into whose hands he delivers them in their rough state.

We know but comparatively little of the earth beyond the depth which has been reached by mining operations. This depth when compared to the entire bulk of the earth, may be correctly compared to the minute scratching and pin punctures of a coat of varnish on a 12-inch globe. All beneath is mystery and speculation. Of this we shall treat more at length in future numbers.

A Mineral is an unorganized body, differing from an organized or living body in its structure, in the manner of its formation and of its increase or growth. While organized bodies increase by means of their internal organs, which assimilate and retain in the system what is beneficial and reject what is useless, unorganized bodies increase externally.

A simple mineral substance, as pure gold, silver, etc., may be described as an organized body, presenting an aggregate of lesser particles of the same nature, united by affinity.

Every mineral possesses two distinct kinds of character, by one or both of which it may be distinguished from other substances. These are termed the *external* and the *chemical* characters. The former are commonly apparent to the senses, and the latter are those which are developed during the chemical decompositions, which may be accomplished with or without heat. These characters are denominated as follows: Aspect, or kind of lustre; color; hardness; specific gravity; streak; form; structure; cleavage; surface; tenacity and transparency.

Aspect, or kind of lustre, is very important, and is divid-

ed into metallic and non-metallic aspect: they are often blended in the same mineral. Many minerals also possess two distinct kinds of lustre, one externally and the other internally. The true metallic lustre may always be distinguished from the metallic, pearly-adamantine lustre, by its being always combined with perfect opacity, and by remaining unaltered on the scratched surface.

Color is also of considerable importance when combined with metallic aspect. In speaking of color, in connection with minerals, the depth or shade of color should be carefully noted, and the peculiarity of shade expressed as near as possible, by reference to some well known substance.—The metallic colors are white, divided into silver and tin-white; grey, lead-grey and steel-grey, yellow, brass-yellow, bronze-yellow and gold-yellow; black and copper-red.

HARDNESS is one of the most important of mineral characters. There are generally reckoned ten degrees of hardness: 1, yields easily to the nail. 2, yields with difficulty to the nail. 3, scratches a copper coin, but is also scratched by it. 4, not scratched by copper, but is not hard enough to scratch glass. 5, scratches glass, though with difficulty, leaving its powder on it, and yields easily to the knife. 6, scratches glass and yields with difficulty to the knife. 7, does not yield to the knife, but does to the edge of a file, though with difficulty. 8 and 9, harder than flint. 10 cuts glass.

SPECIFIC GRAVITY.—That is, the weight of a body compared to some other body of the same size or volume. This latter body is assumed as a standard; this standard is pure water at a temperature of 60° Fah. A cubic foot of water weighs 997-136 ounces—usually taken as 1,000. A cubic foot of silver weighs 10,000 ounces; therefore we say silver is ten times heavier than water, and its specific gravity is 10-0.

STREAK is a very effective character; it signifies the color of powder, produced by drawing or streaking a mineral across a file. The best way to distinguish the streak is to take a fine file, and draw it once or twice across the mineral, pass it lightly over your finger; when the color will be left thereon, and may be easily noted.

FORM is a character, when regular, of the highest interest, yet of limited utility in the discrimination of minerals.

STRUCTURE AND CLEAVAGE.—The structure of minerals is the mode of aggregation of the particles of which they are composed. *Lamellar structure* is composed of broad, distinct concretions, of about equal length and breadth. *Prismatic, or bladed structure*, consists of long and narrow concretions, forming a transition from the lamellar into the fibrous structure. *Fibrous structure*, consists of fibrous, or very thin and capillary concretions, either straight or curved. *Granular structure* is composed of minute or small concretions, and appears to consist of one compact mass.

SURFACE.—The surface of minerals may be either uneven, granulated, rough, smooth, or streaked; streaked surfaces often arise from a close fibrous structure, or otherwise indicate the direction of cleavage planes.

TENACITY.—The following are the different degrees of tenacity:—*Brittle*, such as grate under the knife, or fly off in the form of powder when attempted to be cut; and break into powder when placed on an anvil and struck by the hammer. *Malleable or ductile*, the property possessed by minerals which may be cut by the knife, and which flatten into spangles under the hammer.

TRANSPARENCY.—The following are the degrees of transparency, or transmission of light, as possessed by minerals: 0, Opaque. 1, Translucent on the edges. 2, Translucent. 3, Semi-transparent. 4, Transparent.

DEGREE OF LUSTRE is distinct from the kind lustre or aspect of minerals. The degrees of lustre are marked by the following numerals: 0, Dull, devoid of lustre. 1, Glimmering. 2, Glistening, or weakly shining. 3, Shining, as rock crystal. 4, Splendent, or strongly shining, as galena.



pearance of the surfaces produced on breaking a mineral in any direction, except in that of its natural joints or cleavage planes, which ought to be always smooth, and more or less shining.

Fracture is a character of minor importance; it is the absorbing.

Form, Frangibility, Flexibility, Touch, Soiling and Sound, are all terms which are sometimes employed to describe the characteristics of minerals, but as they of little importance to the general student, we pass them by.

Taste is a characteristic properly possessed by such minerals as are soluble in water.

Magnetism is a characteristic of limited application, but in many cases a very important one. The only metals which attract the magnet, are iron, nickel and cobalt; and there are very few that affect it in their natural state, but may do so after their exposure to the action of the blow pipe.

Electricity.—To ascertain whether a mineral possesses this character or not, a small instrument called an electrometer is necessary. Electricity is produced in minerals, either by heat or friction. To try if a mineral possesses the property of electricity, first rub it briskly for a few minutes with a woolen cloth, and then present it to one of the pith balls of the electrometer; or, heat it gently through and do the same; if in either case it attracts the ball, then it possesses electricity.

The effects produced on minerals by the action of acids, are very important. These effects are effervescence, solubility, partial solubility producing a gelatinous mass, &c. To develop these effects, the mineral should be reduced to powder, and placed in a small test-tube or other vessel, and the acid, either pure or diluted, must be gently poured over it. The application of heat is sometimes necessary, in which case a spirit lamp is made use of, and the mineral and acid supported over it in a test-tube, watch-glass, or small capsule of Berlin porcelain, or of platinum, by means of a thin bent wire.

The treatment of minerals by acids will be fully explained in its appropriate place.

#### MINERALS.

We have already described a mineral as an unorganized body, formed and enlarged by an increase of particles, externally; said particles being attached by mere *juxta position* instead of *assimilation*, as is the case with vegetable and animal organism. All solid substances therefore which possess neither vegetable nor animal life are mineral. All rocks are minerals, and the chief part of soils are mineral.

When a mineral has a metal of any kind associated with it, it is commonly called an ore—as an ore of silver, an ore of lead, copper, etc. Ores are usually found in veins, sometimes, however, in beds. A mineral bed usually lies horizontally, or at a very slight inclination. Lead, zinc and iron are often found in beds; gold, silver, copper, mercury, etc., very seldom.

#### MINERAL VEINS.

A mineral vein may be described as a fissure or crevice in the earth, more or less vertical, and filled with some kind of vein-stone, usually quartz, more or less mixed or impregnated with various metals, and when so mixed, called ores. Most metalliferous veins contain several varieties of metals. The veins of California and Nevada Territory probably contain a larger variety of metals than those of any other portion of the globe. Veins vary in width from a fraction of an inch to one or two hundred feet. They usually range from 10 inches to two or three feet in width. Of the origin of veins and the manner of their being filled, there are various theories. The opinions of practical and scientific writers on this subject are quite various. Some attribute these fissures to a process of cracking or opening of the earth in long fissures by some interior power of upheaval; others attribute their formation to a contraction of the earth's crust in the process of cooling or crystallization; others again suppose them to result from the action of electrical currents. Their manner of filling up is also a matter of great diversity of opinion. Intrusion, sublimation, deposition, infiltration from water, electrical agencies, etc., are among the most commonly entertained theories. The probability is that all the agencies named have contributed at times and in part in a greater or less degree toward preparing these valuable deposits, so indispensable to the progress of civilization and the arts. Our present purpose, however, being to treat upon facts, we shall leave all theorizing for the time being, and confine our remarks to simple facts and positive instruction. In future numbers we shall probably have something to say on the various theories above alluded to.

#### GENERAL LAWS OF VEINS.

Whatever their origin these veins (or lodes as they are sometimes and perhaps more properly called) are, as a general thing, found to obey certain general laws. They are usually contained within clearly defined walls, and are generally found in "sets" or "classes," each individual of any given set being approximately parallel to all others of its class. The different sets usually give evidence of different ages, the newest set being found to have disturbed or displaced the older in passing across it. The different sets are usually known by the general line of their direction as the "East and West set of veins," or the "North and South set of veins." They are usually found most productive near their crossings, also at any point where the vein enters a new class of rock, a change in its mineral productiveness may be

most confidently expected. The point where a "leader" or "string" comes in is usually improved by such contact. On the other hand a sudden enlargement of a lode, where it is not caused by the coming in of a feeder is almost invariably attended with comparative barrenness. The scattering of a lode into a number of small ones is almost universally unfavorable. They are, of course, of more recent origin than the rock which they traverse, through their general characteristics and richness in mineral is often much affected by their passage from one class of rock to another. This latter fact would seem to imply that, to a certain extent, they are dependent for their mineral value upon the mechanical condition of the rocks which they traverse.

#### TRUE VEINS.

As we have already stated, veins or lodes are found traversing all kinds of rocks, stratified and unstratified, often passing from one to the other. They are also sometimes found to traverse a space between two classes of rock, as between the slate and granite, metamorphic (rock changed by heat) and unchanged rock. Veins of this description are usually called "true veins," because they are much more reliable, more clearly defined, of greater linear extent, and generally much larger than veins having both walls composed of the same kind of rock. It is reasonable that these conditions should usually accompany veins of this description inasmuch as fissures between walls of dissimilar rock would naturally present less objections and disturbances and be more continuous in both length and depth, than fissures forced through a homogeneous mass of rock. True metalliferous veins are almost uniformly much more productive than other veins in the same neighborhood. The Comstock vein, in Washoe, is of this description. This is a condition in regard to quartz veins which should be more generally considered than has heretofore been the case in this country. It will, wherever it exists, be found to exert a most important influence on the productiveness and consequent value of the vein.

#### IGNEOUS INDICATIONS FAVORABLE.

Valuable metalliferous veins of ore are often found in secondary and even tertiary formations, yet as a usual thing, they are found more universally productive and most reliable when they occur in the older and metamorphic rocks. We have the proof of this in our own State and adjoining Territories. Those portions of California and the Eastern Slope, where is found the strongest evidence of ancient igneous action, have as a general thing, proved most valuable, in mineral development. Indeed, the idea has been advanced by some, that no metalliferous veins exist entirely disconnected with igneous rocks. It is claimed by the advocates of this theory that whenever surface indications are wanting, metamorphic rocks will invariably be found at no great depth below.

#### PECULIARITIES OF QUARTZ VEINS.

The study of quartz veins, to the mineralogist and miner, is most interesting and important, and one to which quite too little attention has been devoted in this country. In the hasty summary we are now giving, we cannot do the subject that justice which its importance demands; but in future numbers we propose to come back to this head and treat more fully upon it.

Few veins exhibit their true characteristics upon the surface. The action of water and the atmosphere, resulting in the oxidation of much of their contents, and other disturbing influences upon and proceeding from the surface, not unfrequently lead to serious fallacies in judging of a vein in the early stage of its development. An important consideration in the study of veins is the changes which they undergo in their passage from one class of rocks to another. This matter, so far as we have learned, has never been much considered on the Pacific Slope, although it has long been acknowledged as one of much importance in nearly all other mining regions. We append the result of a few observations under this head from various authorities.

De la Beche in his survey of Cornwall says that granite and its modifications is always found near or all locations productive of paying tin or copper mines; while lead, antimony, iron and zinc are found independent of and at a distance from granite.

In the Hartz mountains, veins passing from hard to soft slates lose much of their productive character; hard granites, as a general thing, are also found less productive than soft, or decomposed descriptions.

In the Copper mines of Lake Superior veins in hard greenstone are usually contracted and comparatively barren; but the same veins on entering the granular trap, a much more yielding material, becomes at once expanded, and improved in yield. This is especially the case with the celebrated Cliff and North American mines. The Copper Falls mine is highly productive and well defined in the trap, but on entering a belt of sandstone the vein is contracted to a mere fissure. Nearly all the veins of the Lake Superior region traverse different mineral planes, and in their passage through them are more or less modified, as noticed above. It will be perceived that instances above cited confirm the correctness of our previous remark with regard to the favorable nature of igneous rocks in mineral localities.

We have stated that veins are usually found in "sets" or clusters. California is no exception to this rule. The general direction of the older class of quartz veins in the auriferous districts on the western slope of the Sierra Nevada is

north and south; the east and west series of veins is more recent and may be called secondary.

Mr. Remond of this city, who has paid much attention to the geology of the quartz veins of this state, remarks that "the metalliferous character of the secondary quartz veins is worthy of note. They bear gold, often in crystallized form, which is very rarely the case in lodes running north and south. The numerous threads or minute veins crossing them contain much galena, in small leaf-shaped masses, and sometimes in cubic crystals, with more or less silver. These lodes also contain much white iron pyrites, with some arsenical and copper pyrites.

The following paragraph, which like the one above given, was written some two and a half years since, for *L'Echo de Pacifique*, and, prophetic at the time, has been fully verified by actual discoveries.

"The combinations of these different metals suggests the possibility of the discovery of silver mines. Some specimens taken from the quartz mines of Soulsbyville, resemble the argentiferous ores of Washoe. At Washoe the silver is mixed with lead, iron, arsenic, copper and a little antimony, all the metals being in a condition of sulphurets. At Soulsbyville, the iron and lead predominate, and the other metals are in smaller quantities, with a total lack of antimony."

No other portion of the world has been so carefully studied with reference to its metalliferous formations as Cornwall and Wales, and it has been asserted with much confidence, that a description of these veins would, generally speaking, suffice for those of every other portion of the globe. So far as their direction, length, depth, and dip are concerned, the assumption is doubtless quite correct, but with regard to their contents, we apprehend quite distinctive characteristics will be noticed. No one who has acquainted himself with the quartz veins on the two slopes of the Sierra, can have failed to notice most marked and distinct characteristics between the two. Other peculiarities may be noticed between those and the veins which are found far out toward the interior of the "Great Basin," and others still more marked when we reach the opposite rim of the Great Basin in the neighborhood of Pike's Peak, as will be seen from the following extract which we gave in our issue of April 20th, 1863, from a correspondent of the Territorial *Enterprise*.

"The Pike's Peak ores contain no quartz. They are iron pyrites, more or less mixed with copper pyrites, lead, antimony, etc. \* \* \* On sinking upon this no veinstone whatever is found. The vein is a simple crevice in the granite bed rock filled with pyrites."

In fact almost every vein has much that is peculiar to itself. Perhaps the most simple of metalliferous veins are those known as "gold-bearing," and it is to those, almost exclusively, until within a short period the miners of California have chiefly paid attention. Until after the wonderful developments of the Comstock lead in Washoe, not one prospector in fifty in California ever thought of examining a vein for any other mineral than gold, which is almost always found pure and free, and consequently readily known to the most unpracticed explorer. Hundreds of veins, in California, now known to be of the highest value in silver and copper, were, in the early days of our mining experience, passed by as worthless, simply because they did not "show gold" in working quantities.

Very few of our readers are ignorant of the ordinary indications by which the probable presence of quartz veins is noticed, or the manner usually employed in discovering their locality, or tracing their direction whenever found; hence we will not weary their patience by giving details so generally known.

In examining into the phenomena of quartz veins on the Pacific Slope, it should be borne in mind that but a very limited time has elapsed since the first efforts of mining were undertaken here. On the eastern continent and especially in Cornwall and Wales, mines have been wrought from time immemorial, and yet scarcely a year passes without adding some new fact to the great mass of information already stored up by the generations who have lived and died in studying the theory of those mines, the details of their structure, the relation of those veins to the various ores which they contain, and to the enclosing rocks, etc., etc.

Many of our citizens complain of the apparent dilatoriness of our State Geological Survey, from the fact that our miners are not already put in possession of facts for which English miners have patiently waited whole decades, and for which the English Government has paid an hundred fold more, than our Commission has yet asked for. Such persons cannot be aware of the difficulties and labors attendant upon the solution of the various problems presented in the investigation of so complex a subject as the study of such a wide and varied mining field as is found near and within the boundaries of the State of California.

#### COPPER.

The recent discovery of numerous and valuable veins of copper, throughout the entire length of the State, and the consequent especial degree of attention which is now being drawn to this new interest, has induced us to vary, to a certain extent, what would otherwise have been a natural procession of subjects, in such a paper as we have commenced. And in accordance with numerous requests to that end, we here present whatever may be attainable on the subject of copper, which can be of any practical value to prospectors after, or workers in that mineral.



## THE GEOLOGY OF COPPER.

In referring to the geological conditions under which copper is found, we shall commence with Cornwall, a district furnishing nearly one half of all the tin and copper produced on the globe. The rock in which the copper bearing ores of this region are found is principally clay slate, or *kilts*, as it is there termed. The country, however, is much broken up and diversified by obtrusive granites and elvans, which have been protruded through slates by igneous agencies from below. The general direction of the copper veins is east and west, and nearly at right angles with the tin lodes. The ores of copper and tin are seldom found in the same vein in Cornwall, and neither metal is often found in very great abundance at a less depth than 80 or 100 feet below the surface. Some copper veins in that district have been traced several miles—in one instance seven, without any evidence of discontinuance even at that point. No person has ever yet seen the bottom of a vein of either tin or copper. The ores found there are usually the yellow sulphuret of copper and iron, with which are associated at times, black, and gray sulphuret, red oxide, and native copper. The general average of these veins is about 2½ per cent., but which by dressing is actually brought to about eight per cent. before smelting.

FRANCE affords but one workable mine of Copper. Numerous mines have been wrought at various periods in the past, but, we believe, with the above exception, they have all been abandoned. The copper veins of this country are everywhere found associated with aluminous slates, more or less metamorphic, and among which, at frequent intervals, porphyritic rocks have been protruded. The mines at Chessy are directly at the line of junction of the granite and lias, (the latter a species of limestone.)

GERMANY.—The Copper Mines of the Hartz mountains occur in grauwacke slate in which numerous belts of trappean rocks have been obtruded. The mines of Rheinbreitenbach are in the same character of formation, and are productive in pyritous variegated copper.

SPAIN.—The general character of the deposits of this metal in Spain, is similar to those of the Hartz mountains.

In the Province of Hueloa is a district of much mineral wealth, the formation of which is clay-slate, traversed by numerous porphyritic eruptions, and it is near the line of contact of the slates and porphyry that nearly all the metalliferous veins occur—the most valuable being directly between the two formations, having a wall of schistose slate on one side and porphyritic granite on the other; the former usually composing the south wall and the latter the north wall of the veins. The veins are often found with both walls of porphyry, and sometimes, though infrequently, with both of slate.

PRUSSIA.—In the vicinity of Mansfield, in Prussia an interesting deposit occurs, known as the "Keeferscheifer," or copper slate—a thin layer of which occurs in magnesian lime stone. Throughout the entire body of this "copper slate" is disseminated gray argenteous copper ore.

Near Schemnitz, in Hungary, is an interesting metalliferous region, which produces about 5,000 tons of copper annually. The veins of this district are found altogether in porphyritic rocks, connected with sienites and passing into granites. The predominating vein rock is quartz and sulphate of barryta. The ores are pyritous and gray copper.

NORWAY AND SWEDEN.—The veins of these countries are almost exclusively confined to the gneiss and mica slate, more or less metamorphic from subterranean heat. The copper of this region is highly esteemed in consequence of its purity and freedom from arsenic and other metals.

RUSSIA.—The copper deposits of Russia, in the Ural Mts., are also remarkable for the purity and richness of their ores. The copper ores of this region are found chiefly in thin veins and nests of malachite, which lies in a broken, unconsolidated mass of detritus, overlying the surface of the upturned edges of limestone strata, intermixed or rather intercalated with ridges or ledges of trappean rocks. This malachite, though not in immediate contact with trappean rocks doubtless owes its origin, indirectly to igneous action, being probably a secondary product resulting from, cupriferous sublimation, accompanied by stalagmite deposition.

CUBA.—The copper deposits of Cuba, like those in the Ural Mountain region, are not in regular veins, but in masses, in immediate connection with igneous rocks, such as greenstone and serpentine. The gangue of these deposits is composed of quartz, and common white marble. The ore consists chiefly of yellow sulphurets, although blue carbonate of copper is not uncommon.

CHILE.—The copper mines of this country are very numerous and of great value. They exist chiefly in metamorphic granite, with veins of quartz and jasper.

IN AUSTRALIA the mines of copper are situated in an association of rocks quite similar to those formed in the Cornwall copper districts. The Barroosa district is in mica slate, similar to the killas (slates) of Cornwall. Through these slates, as in those of Cornwall, granites and sienites have been protruded, at frequent intervals. On the Copper Mine River, the enclosing rock consists of trap and sandstone, with occasional layers of limestone.

IN LOWER CALIFORNIA and Carmen Islands, we learn from verbal communication that the enclosing country of the copper veins consists almost altogether of igneous rocks.

From the above data it will be seen that copper ores are

found in almost all positions, from the most recent clay slates and detritus to granites, but invariably either in actual contact with or in the immediate vicinity of igneous or metamorphic rocks. Perhaps no metal presents more uniform evidence of an origin derived from an igneous agency than copper in its various ores. Of its origin we shall speak at a future time.

With the exception of iron no metal, used extensively in the arts, is more generally distributed than copper. There is scarcely a known country on the globe where it has not been found in workable quantities.

It is hardly necessary that we should occupy space in a journal for California readers, to direct them how to find or trace a mineral vein; yet a few brief hints to aid the prospector in determining when he has found a copper vein may not be out of place.

## TO TEST COPPER ORE.

Perhaps there is no characteristic of copper veins so general as their color. Whenever a mineral of a green or blue color is met with the presence of copper may be reasonably suspected.

A very simple and ready method to test the presence of copper in any ore is to drop a little nitric acid upon it, and after a short time dip a feather into the acid, and wipe it over the blade of a knife. If there be the least quantity of copper in it, the same will be precipitated on the knife. Perhaps a simpler mode than this cannot be named.

A Blow-pipe test may readily be made as follows:—Place a small piece of copper ore, with a little borax on a piece of charcoal, and apply the flame of a blow-pipe, when if any copper is present it will soon show itself in a small globule.

Again take a small quantity of the ore and pulverize it; place the powder in a small vial, add three or four times its bulk of nitric acid, which will soon dissolve the powder; then add a little water, and dip the point of a knife, or any piece of bright iron into the liquid. If copper is present the iron will be found coated with it.

## MUNDIC—PYRITES.

One of the most common characteristics upon and near the surface of a vein of copper is the appearance of large quantities of Pyrites—sometimes called Mundic. Whenever this mineral is so found, in great abundance, especially if in a region productive of copper, the miner may have the utmost confidence in prosecuting the work of developing his vein. Pyrites are most usually yellow, varying from nearly the color of gold to an iron white.

Pyrites sometimes contain, mechanically mixed, small quantities of gold. They are then called "auriferous pyrites." The gold mines of California contain large quantities of this description of mineral, and thousands of tons are now being worked for this metal. They are, here, usually concentrated from the sands which have passed through the ordinary gold processes. One of the most extensive and perhaps the most thorough establishments for working auriferous pyrites, is that carried on by Mr. Deetkin, a short distance from this city, on the San Bruno road.

Copper pyrites constitute the principal ore of that mineral, and frequently occur very massive, occupying the entire width of a vein, sometimes many feet in thickness, but oftener in strings and bunches comprising but a small percentage of the entire contents of the vein. Copper pyrites is not considered a rich ore. The yield of copper is usually from 8 to 20 per cent, rarely reaching 25. The richness of this ore may generally be pretty correctly estimated by its color. If of a fine yellow color and readily yielding to the hammer it may be considered a good ore; but if hard and of a pale yellow color it may be set down as a poor quality of ore. The color and consequently the value of this ore is attributable to the more or less abundant presence of iron.

## GOSSAN.

We hear much said among copper miners and prospectors for copper, about "gossan," and furthermore that the appearance of gossan is a good indication of copper—and so it is. The question is also often asked, "What is gossan?"

Gossan is nothing more nor less than decomposed mundic, or iron pyrites. It is usually of a yellowish color, sometimes, however, approaching to dark red. The more general composition of gossans oscillates between the two extreme results as given below:—

	No. 1.	No. 2.
Quartz.....	10	85
Water, etc.....	10	3
Oxides of Iron.....	80	12
	100	100

The term, gossan, originated in Cornwall, and for a time was local, but is now quite generally used in this country also. The existence of mundic or its common resultant, gossan, is not universal. In some rich mining districts no iron, or very little at most exists in the veins; in such, the ferruginous stain is wanting and gossan is not seen.

In California, we presume, from copper explorations thus far made, and from the general character of all our quartz veins, gossan will be almost universally met with, and wherever it or mundic is found, rich and valuable ores of copper, and possibly of tin may be confidently looked for at depths ranging from 15 to 100 feet beneath. Gossan, of itself, is generally of but little value. Although it sometimes contains small quantities of both gold and silver, and not unfre-

quently copper. It is often found, in small quantities, far down on the vein.

Beneath the gossan, we frequently observe appearances strongly reminding us of the common electrolytic process for procuring copper from a solution of sulphate of copper. The pure metal is gathered together in clinks, and cavities between the main mass of gossan and the body of the undecomposed copper pyrites, mingling perhaps with the lower part of the former. Sometimes this native copper, as it is called, may retain its metallic character; but at others it becomes converted into an oxide, and this again into a carbonate, by the percolation of waters containing common air and carbonic acid.

With regard to the formation of this native copper, it is probable that the sulphur, by a union with the needful oxygen, becomes sulphuric acid, and that, this formed, the copper is attacked and removed, to be dealt with like any other solution of the sulphate of copper.

We can hardly conceive it possible that the copper from a fluid state, has been forced up from below like dikes of porphyry or greenstone. An elastic force sufficient to raise a fluid mass of three times the density of lava would shatter the enclosing walls, and force the copper into the fissures. If this were its origin, we ought to find it occupying the depressions in the surface rocks in the vicinity of the fissures, like modern lava currents.

We find the copper investing various crystallized minerals, and every wave and stria of the pre-existing crystals is faithfully represented, it is impossible by any artificial method to cast this metal so as to exhibit such minute lines. They are as delicate and faithful as could be obtained by the electrolytic. Again the associated minerals do not exhibit the effects of a high temperature. Also, if the contents of the veins were the result of injection, their productiveness would be unaffected in their passage through different mineral planes. Lastly, copper and silver combine in indefinite proportions, forming homogeneous compounds; and yet we find them existing side by side a most chemically pure. Admitting that they once formed a homogeneous compound, it is reasonable to suppose that they have been separated by electro-chemical agency.

## COPPER ORES.

The ores of copper are quite numerous and present a great diversity of appearance, yet they are all very readily distinguished, each from the other, by certain unmistakable characteristics, which are rendered familiar by a very little attention. The presence of copper in any ore having been determined by the "test" above given, the character of the ore can, in most instances, be determined by the following description:

## CHARACTERISTICS OF COPPER.

The ores of copper are divided, by metallurgists, into 13 different classes, and each class is subdivided into many varieties. The richest of the ordinary ores appear under two general aspects: the first having a metallic lustre of copper red, brass yellow, iron or blackish gray, at times inclined to blue; the second is without metallic appearance, of a reddish color, verging upon purple, blue or green, the last being the most usual tint. The classes of ore most frequently occurring are Native Copper, Sulphuret of Copper as Copper Pyrites, Gray Copper, Sulphate of Copper, Carbonate of Copper and Arseniate of Copper. The most common are sulphurets and oxides, the former being the most abundant. Sulphuret of Copper occurs in all considerable copper districts, and is abundant in California. The color of this ore is a blackish lead gray, approaching, at times, to tarnished blue green. It is considered one of the richest ores, and generally occurs in very heavy veins.

Copper Pyrites greatly resembles in appearance, sulphuret of iron, common in the gold bearing quartz of this State. The color of the Pyrites is brass yellow, subject to tarnish, with greenish black streak and uneven fracture. Copper Pyrites are readily distinguished from iron pyrites, which they greatly resemble, by their inferior hardness; they may be cut with a knife, while iron pyrites will strike fire with steel. A marked difference may also be noticed in the effects of nitric acid upon the two substances. They do not form so rich an ore as sulphurets. The richness of the pyrites may generally be judged of by their color. If they present a fine yellow hue, and readily yield to the hammer, they may be considered a good ore; but if they are hard and of a pale yellow color, they are mixed with iron pyrites and consequently comparatively barren of copper and constitute a poor quality of ore.

Carbonate of Copper is of a blue or light green color, with pale green streak. It often occurs in beautiful green crystals. It is also known as Malachite. Green Malachite or Green Carbonate of Copper admits of a high polish like marble, and when obtained in large slabs, is often formed into tables, mantle pieces, etc.

Arseniate of copper is of various shades of olive green, and sometimes occurs in beautiful blue crystals. It readily melts before the blow-pipe, throwing off fumes of garlic odor. This ore is but little worked.

Gray Copper ore is of a steel gray color, more or less deep, either bright or dull. The value of this ore is often very materially increased by reason of the silver which it contains. It is generally accompanied, to a greater or less extent with copper pyrites.

Sulphate of copper (Blue Vitriol,) is similar to the arti-



cial salt of the laboratory. The water flowing from mines of this ore has a blue tint, caused by the solution of this salt. Copper is easily obtained from this water, in a metallic state by depositing pieces of scrap iron in it.

[The ores above named are about all the ores of copper worked to any considerable extent.]

Native Copper occurs in crystals, branches, and filaments, its most common locality being in primitive rocks. It is found abundantly in Siberia, at the mines of Tourinski, in those of Hungary, Sweden, Cornwall, &c. The gangues of native copper are granite, gneiss, mica-slate, clay-slate, quartz, carbonate or fluoate of lime, sulphate of barytes, &c.

Red oxide of Copper is deep red, sometimes very lively, especially when bruised. It is friable, difficult of fusion at the blowpipe, reducible on burning charcoal, soluble with effervescence in nitric acid, forming a green liquid.

Black oxide of Copper is of a velvet black, inclining sometimes to brown or blue; and it acquires metallic lustre on being rubbed. It is infusible at the blowpipe.

Hydrosilicate of Copper consists essentially of oxide of copper, silica, and water. Its color is green; and its fracture is conchoidal with a resinous lustre, like most minerals which contain water.

Diopside Copper, or Emerald Malachite; a beautiful but rare cupreous mineral, consisting of oxide of copper, carbonate of lime, silica, and water in varying proportions.

Phosphate of Copper is of an emerald green, or verdigris color, with some spots of black. It presents fibrous or tuberculous masses with a silky lustre in the fracture. It dissolves in nitric acid without effervescence, forming a blue liquid; melts at the blowpipe, and is reducible upon charcoal, with the aid of a little grease, into a metallic globule. Its powder does not color flame green, like the powder of muriate of copper.

Muriate of Copper is green of various shades; its powder imparts to flame a remarkable blue and green color. It dissolves in nitric acid without effervescence; and is easily reduced before the blowpipe. Its density is 3.5. By Klaproth's analysis, it consists of oxide of copper 73, muriatic acid 10, water 17.

The copper of Lake Superior contains about 3-10ths of one per cent. of silver. The copper of this State, mostly if not all, doubtless contains an appreciable quantity of both gold and silver. Of this we shall probably receive more definite knowledge when full returns are received from ores which have been sent East for reduction. A little metallurgical knowledge will be found of vast importance to the miner everywhere, and especially in California, where the mineral deposits assume such unprecedented profusion. Our miners according to present indications, will soon become as familiar with copper ores, as they have, for the last ten years, been with gold.

#### THE COMPARATIVE VALUE OF SOME OF THE MOST COMMON OF THE ORES OF COPPER.

Native Copper generally occurs almost pure, and in almost every conceivable form, as massive, granular, filiform (thread-like), arborescent, in thin laminae, etc. When found associated with other metals, such as silver, for instance, the two metals usually occur in juxtaposition, simply, and not combined, a condition which they readily assume when melted together in the crucible.

Sulphuret of copper is very rich ore, yielding copper 76.5; Sulphur 23; and iron 5.

Red Oxide of Copper is a very rare and rich ore. Very little, so far as we have learned, has yet been found in this State. When free from earthy impurities its yield is 88 @ 91 of copper, and 9 @ 12 of oxygen.

The Black Oxide of Copper, in its pure state yields from 70 @ 80 per cent. of copper. Both the black and red oxide yields readily in the reducing flame of the blowpipe a globule of copper.

Variagated Copper Ore (Peacock Ore) gives 50 @ 56 per cent. of copper, and promises to be quite common in the mines of this State.

Copper Glance, or Redruthite yields from 70 @ 75 per cent. of copper, when quite pure, and in that condition may be readily melted in the ordinary flame of the candle.

It sometimes, though rarely, occurs in connection with Bismuth, when it falls as low as 18 to 20 per cent.

Antimonial Copper is neither very common or rich. It yields 20 @ 75 per cent. of copper. An ore of the latter yield occurs on the Colorado, near Williams' Fork, in this state.

Green Carbonate of Copper (Malachite) in its pure state contains 75 per cent. of copper.

Blue Carbonate of Copper is usually a richer ore than the green and contains from 65 to 70 per cent. of copper.

Gray Copper, is a very rich and promises to become a quite common ore, in this State. Its yield of copper is from 40 @ 50 per cent. This often contains as high as ten per cent of silver, and sometimes a small quantity of quicksilver.

Copper Pyrites is the most abundant of the ores of copper and usually about the poorest. Its yield is greatly affected by the presence of iron and varies from 12 to 30 per cent.—rarely, however, reaching 25.

If tin is ever found associated with copper in California

it will probably be with this description of ore. When so found it is usually in about the following proportions:—Copper 30; tin 26; iron 14; sulphur 30.

#### INDICATIONS OF TIN PYRITES—ASSOCIATED WITH COPPER.

Tin Pyrites occurs massive, like copper; its lustre is metallic with streak black; color from steel-gray to iron-black, sometimes presenting a bluish tarnish, with an uneven fracture. When heated in an open tube it gives off sulphurous fumes, with a slight sublimate of the oxide of tin. On charcoal, with the blow-pipe, the sulphur is first expelled, after which a dark scoriaceous (pertaining to dross, like the dross or scoria of metals) globule is obtained. The charcoal will also be coated with the oxide of tin. With soda, a globule of iron ore copper is obtained.

This species of pyrites may be more confidently looked for in a granite rather than a slate region. Copper miners will do well to keep a good lookout for this mineral, as, if found it will be a valuable ore.

Arsenic Copper (Domeykite) which may be known by its reniform and botryoidal appearance, (reniform, having the shape or form of kidneys; botryoidal, shaped like a bunch of grapes) is a very rich, though somewhat rare, ore. It yields, when pure, about 70 per cent. of copper, and 30 of arsenic. Its composition sometimes varies so as to bring the copper as low as 60, with arsenic 20, and 20 parts of iron and sulphur.

Sulphate of Copper yields about 25 per cent. of metal, and occurs irregular in shape and, in three-sided crystals, with a glossy lustre, approaching the sky-blue, in lustre. This mineral is often found dissolved in the water which issues from the mine. The copper from these waters is obtained by precipitation with iron. At a mine in Wicklow, 500 tons of iron were laid at one time, in the pits into which the water was collected, and in about twelve months, this iron was all decomposed or dissolved, and each ton of iron was found to have deposited two and a half tons of a reddish mud, which was an oxide of copper, and which upon proper treatment yielded 15 cwt of pure copper to each ton of oxide.

#### MINING STATISTICS.

The value of mineral products in Great Britain, in 1855, amounted to one hundred and sixty-one million dollars, and when prepared for manufacturing purposes, \$190,000,000. The relative proportion of which coal appears to amount to 49 per cent.; clays, slates and sundries, 23; Iron 13 per cent.; Copper 8 per cent.; Lead 4 per cent.; Tin 1 per cent. The production of iron increased 300 per cent. in 28 years, ending prior to 1855, and amounting to 3¼ million tons. The average per cent. of copper for ten years, ending 1785, was 12 per cent.; for ten years ending 1855, 7½ per cent.; for 1857 was 6¾ per cent. These figures clearly indicate the economical value of improvements which have been effected in the working of the mines. The number of people employed in these adventures, was 304,000, of which 91,000 were females, and those under 20 years of age. The number of these adventurers 3,271 of which there is 172 copper vein leads, 330 tin, 156 residue of coal and iron mines. When we take into consideration the enormous amount that is realized to the Kingdom of Great Britain from her mineral resources who can predict the future of the Pacific coast, with the existing facts in view whilst the character of our mines is much richer and we can multiply their metallic veins by tens of thousands by the assistance of a Pacific Railroad and time sufficient to develop the resources. The Pacific slope will, in less than 26 years, produce more in value of the precious metals than the balance of the world.—[Marysville Appeal.]

SMOKEY CHIMNEYS.—A correspondent of the London Builder gives the following cure for a great and common evil:—

I have built many chimneys in all possible situations, and have found one simple plan everywhere successful; the only secret being to construct the throat of the chimney (the part just above the fire-place) so small that a man or boy can barely pass through it. Immediately above, the chimney should be enlarged to double its width, like a purse, to the extent of about two feet in height, and then diminished again to its former proportions. No chimney thus constructed will ever smoke.

THE COPPER SMELTERS of Swansea are crowded at the present time with orders. The recent advance in the price of copper has given a new impetus to the working of the mines. The mining interests of Great Britain, generally, were never so flourishing as at the present time. Burra copper is quoted at £100; Rapuda at £102 and Chili at £90. Iron has largely advanced with confirmed and increasing demand. Buyers in the metal market, at latest dates were operating freely, and there was every prospect of prices being maintained. Much confidence was also felt that a further and considerable rise will take place.

RIVERSIDE.—This is the name of a new "city" just laid out in Keys' Mining District, Owens's River, ninety miles south of Aurora, and fifty miles above Bend City.

#### PRICE OF GOLD.

We observe, says the *Mercantile Gazette* of the 22d inst. from the tenor of some of our recent Eastern exchanges that more reasonable views are being entertained in regard to the advance in Gold. Instead of attributing it so largely to the movements of speculators and heaping maledictions upon the "Gold mongers," they are now willing to admit that under all the circumstances, the marvel is not that Gold has advanced, but that it has not advanced more. The large adverse balance of trade—the light export requirement for our surplus products—the dwindling of Gold receipts from California—the continuance of large shipments of treasure from the Atlantic cities, the absorption of coin by Government for customs, and the increased issuance of paper are recognized as causes adequate to an advance of 30 ½ cent within a month. "Nothing," says the U. S. Economist, "but the hopes excited by our recent successes could have prevented a much greater advance than has actually occurred. All things considered the balance of probability indicates a continuance of high prices rather than a speedy fall to the late low range."

The demand for gold, on foreign account is very great at the present time, and an increased supply is thought indispensable to Europe. The Mexican War, the Polish insurrection, the generally troubled condition of Europe, the immense call for specie for the purchase of cotton in Egypt and India, and the increase in America of exports all combine to make the present demand for gold urgent in the extreme. There is at this moment a balance of about \$65,000,000 due the East which must be covered by remittances in specie. The recent advance of the rates of discount by the bank of England to eight per cent is mainly owing to this pressing demand.

The London Economist gives a much greater prominence to the drain of the precious metals to India and East, than does the Times. The imports of Raw Cotton from those countries during the current year, as compared with 1862 shows an excess of \$80,000,000 while the increased export of both Treasure and Merchandise in that direction is but 10 per cent of that amount. Silver is the favorite remittance to Oriental markets, and the demand for it has, in the opinion of the Economist, been the chief cause of the pecuniary pressure, which has advanced the rate of discount within a few months from 2 and 3 per cent per annum to 6 and 7 per cent, and 8 per cent, as we learn by the latest telegrams. The general Continental demand is ascribed by the Economist to the troubles in Poland, the disturbance in Hungary, the heavy expenses of the Turin and French Governments, and the critical condition of Germany in consequence of the unsettled state of the Holstein question. Public stocks have greatly declined at London.

RAISING WRECKED CARGOES AT THE EAST.—Apropos to the question of the possibility of raising the *Aquila*, comes the following from a late number of the Providence, R. I. Press, of a late date:

"The Medford Wrecking Company are pursuing their operations in this vicinity, raising the cargoes of wrecked vessels. The job they are now at work on is the raising of a cargo from the wreck of a vessel which drove into West Dumping Cove in a storm, ten years ago, and went down in four fathoms of water. Her cargo consisted of two hundred tons of heavy block granite, weighing several tons each; in the cargo were two blocks of hewn granite, worth \$500 each. For this cargo, or such portion of it as they may be able to raise, they are to receive \$4 per ton, delivered on Long Wharf. They operate by means of divers, provided with the usual submarine armor. There are four of these who relieve each other at regular intervals of two or three hours each. Having completed this job, there are two other cargoes of granite, severally on Beaver trail and Point Judith, which they design raising. During the last war with Great Britain, a transport loaded with brass ordnance was sunk in the harbor of Newport, the locality of which this company will endeavor to determine by explorations, with a view of raising the guns.

Action, by the Chamber of Commerce, upon the question of raising the *Aquila* has been suspended, for the present, on account of the reception of a dispatch to the effect that the Government and underwriters have come to an understanding with regard to the question of "liability." As soon as telegraph communication, which has been suspended for a few days, is once more opened, we may expect to see some decisive and energetic steps taken in the matter.

25,000 persons are engaged in Peru in obtaining india-rubber to supply the foreign demand.



Parties addressing this office should be particular to write the name 'MINING AND SCIENTIFIC PRESS' in full, to avoid all liabilities of mistakes.



**MINING AGENCY.**—By reference to our advertising columns it will be seen, that we have made arrangements to obtain special information, through a resident correspondent, with regard to any particular mine at Reese River. Parties in the city about to invest in "feet" in that neighborhood, and not having time or caring to incur the expense of visiting the locality, will do well to avail themselves of the opportunity hereby presented in securing reliable information, previous to investment, at a moderate cost.

Persons already holding "feet" and desirous to learn through a disinterested source the actual condition of the mine in which they may be interested, will do well to embrace the opportunity here presented of securing the desired information.

We shall establish agencies similar to the above in all the principal mining districts, at an early day.

### A New and Valuable Book.

**Process of Silver and Gold Extraction,** by Guido Kustel, Mining Engineer and Metallurgist, former manager of the Ophir Works, &c.; 260 pages octavo illustrated.

This admirable work has met with the highest commendations from the Press and Scientific men, as a clear and able exposition of the science as practiced in California and Nevada Territory—it is written for the people in good plain English and finely illustrated.

Price—post paid—Cloth \$6; Sheep \$7  
A. ROMAN & CO.,  
Booksellers, Importers and Publishers,  
417 and 419 Montgomery street,  
San Francisco.

nov30

JOHN HILL.

### Tabor & Hill

**Stock Brokers and Real Estate Agents,**

502 Montgomery St., cor. Sacramento,

Buy and Sell Mining Stock on Commission. Are members of the San Francisco Stock & Exchange Board, and of the, San Francisco Board of brokers. nov23

### Giffards Injectors,

FOR SUPPLYING OILERS WITH FEED WATER without Pumps. No Mill or Mining Company should be without one of these valuable instruments. Send for a Circular.

DAVID STODDART, Agent,  
je22 Cor. Pine and Front Sts., San Francisco.

### VULCAN IRON WORKS COMPANY,

P. Torquet, Manager,

STEAM ENGINE BUILDERS

and  
BOILER MAKERS,

**Iron Founders and General Engineers,**  
No 137 & 139 First street, San Francisco.

Pumping, Hoisting, Mining and Quartz-crushing Machinery.

Shoes and Dies of the hardest iron,  
Russia Iron Punched Screens,  
Steamboat Machinery: Saw, Flour and Sugar Mills.  
High and Low Pressure Boilers of all styles,  
JOURNAL and other Turbine Water Wheels with latest improvements.

### LEWIS COFFEY AND RISDON,

STEAM BOILER AND SHEET IRON WORKS.

The only exclusively Boiler Making Establishment on the Pacific Coast Owned and conducted by Practical Boiler Makers. All orders for New Work, the repairing of Old Work, executed as ordered, and warranted as to quality.

Old Stand, corner Bush and Market Streets.  
Opposite Oriental Hotel, San Francisco, Cal.

LEWIS COFFEY J. N. RISDON.

### THEODOR KALLENBERG

Maker of Models

FOR INVENTORS.

**MACHINES, MATHEMATICAL, Optical and Philosophical Instruments, Scales, Weights, etc.; Steel stamps, Dies and Die Sinking, Embossing Stamps. Repairing of Machinery promptly attended to.**  
No. 418 Market street, San Francisco.  
n7.3m

### KUSTEL & DEETKEN'S METALLURGICAL WORKS,

FOR THE REDUCTION OF

SILVER AND GOLD ORES,

Tailings, Sulphurets, Arseniurets, Etc., Etc.,

Capellation and Refining of Silver and Gold,

Practical Assays for Silver and Gold,

Small and Large Quantities, by Smelting, Chlorination and Pan Manipulation.

WORKS—On the San Bruno Road.

Office—No. 605 Montgomery st, San Francisco.

nov 7 ft.

### GENERAL NOTICES.



**DR. H. AUSTIN,  
DENTIST,**

No. 634 Washington street,

Between Montgomery and Kearny, (over San Francisco Baths.)

I have recently received from London a New and Beautiful Vulcanite (India Rubber) for Artificial Teeth, which is far superior to any other ever used. It is light, clean and durable, and of a natural color. The cheapest and best material for temporary (and in many cases) permanent sets. All operations thoroughly performed, and at reasonable prices. Je-29

### DESKS

AND

**Office Furniture,  
OF ALL KINDS..... FOR SALE BY**

**JOHN WIGMORE,**

No. 423 CALIFORNIA ST., SAN FRANCISCO.

OFFICE JOBBER, of all Kinds, attended to.

### SQUARZA'S PUNCH.

FIRST PREMIUM

AT THE SACRAMENTO AGRICULTURAL STATE FAIR FOR 1862.

ALSO; FIRST PREMIUM

At the San Francisco Bay District Agricultural Fair, 1862

MANUFACTORY, WHOLESALE AND RETAIL,

No. 44 Leidsdorff street,

Opposite the What Cheer House, San Francisco.

**FREDERICK MANSELL,  
MECHANICAL & ARCHITECTURAL  
DRAUGHTSMAN,**

No. 422 California street, corner of Leidsdorff

Drawings of Models made for parties applying for patents at Washington or London. mar23 2m

El Paso District, Los Angeles County,

### MINING AGENCY.

C. W. TAPPAN, GENERAL AGENT,

"Head Quarters," Mesquit Springs,

Will attend to any business connected with these mines for a reasonable consideration.

LETTERS OF ENQUIRY, containing Resign or Postage Stamps to the value of fifty cents, and enclosing an addressed envelope for reply, will be promptly attended to. The subscriber has a carefully prepared map, (and specimens) of each lode in the district, a portion of many of which are for sale at very low figures.

For further particulars he would refer to J. Barnett, Esq., 425 Davis St., San Francisco Cal.  
El Paso, June 21, 1863. C. W. TAPPAN.  
au31

### R. W. MYERS, & CO.,

Chases' New Mill, Fremont St., near Market,

JOB TURNING & SCROLL SAWING.

BRACKETS,

RED WOOD BALUSTERS,

NEWEL AND CEDAR BALUSTERS

for Stairs.

Manufacturers of every description of Oval,

Circular and Square

PICTURE & LOOKING GLASS FRAMES

For the Trade at New York Prices.

All kinds of Designs for Building.

R. W. MYERS.

H. C. SOMES

### MINING LAWS AND FORMS

**JUST PUBLISHED BY H. H. BANCROFT**  
AND CO., being a compilation of the Statutes of this State relating to Mining Corporations, Assessments, etc., with a digest of decisions of the Supreme Court and Forms for the Incorporation of Companies. Compiled by H. B. Congdon. 12 mo., flexible cloth, \$1.50 For sale at all the Bookstores. sep14

### H. C. KIBBE,

MINING SECRETARY,

Commissioner for Nevada Territory,

542 Sacramento st., cor. Montgomery

(ARMORY HALL.)

### GENERAL NOTICES.

### WHEELER'S

**Amalgamating and Separating Pans.**

It is acknowledged by all who have examined the principles and witnessed the operation of these Pans, that they are decidedly superior for triturating and amalgamating purposes to any other in use.

The most important principle connected with the operation of these Pans is the separation of the triturating process from that of extracting the amalgam from the sand. The chief cause of loss of the precious metals arises from the passing off of the same in combination with the quicksilver, during the process of triturating, and in cleaning up. By the introduction of the Separating Pan to flow the triturating loss is entirely avoided. To working these machines there is no appreciable loss of quicksilver, and hence none of the precious metals.

Where these Pans have been introduced and operated by the side of others on sands from the same vat, the Wheeler Pans have uniformly gained a large percentage of metals over its competitors, as well as a still larger percentage in the amount of work performed.

\* \* \* These Pans have been in daily operation, at the Miner's Foundry, on First street in this city, where all interested are invited to call and examine for themselves. 2016-1f ZENAS WHEELER.

### Wm. P. TAAFFEE,

IMPORTER AND JOBBER OF

**Staple and Fancy Dry Goods,**

CARPETS, DUCK, ETC.,

Cor. Front and Sacramento streets,

SAN FRANCISCO.

### NATHANIEL GRAY,

**General Furnishing Undertaker,**

641 Sacramento st., Cor. of Web b

SAN FRANCISCO.

Geo. A. METCALF.

D. S. HUTCHINSON.

### METCALF & HUTCHINSON'S

**PHOTOGRAPHIC GALLERY,**

650 Washington st. Three doors below Kearny.

Having refitted the above rooms the Firm are now prepared to furnish the public with a superior style of Pictures, at a lower price than ever before offered in the city.

CARD PICTURES.

As we have every facility for producing these beautiful pictures, in all their different varieties, we have reduced the price to

\$3. Per Dozen!

Large sized Photographs \$3—Extra copies \$1 each.  
AMBROTYPES in all Styles and prices.

OLD PICTURES copied with care and accuracy, in any style desired. Particular attention paid to pictures of Children.

Pictures painted in Oil or Water Colors, and retouched in India Ink by a competent artist. aug.

WM. H. MEAD,

THEODORE VAN TASSEL.

**MEAD & VAN TASSEL,**

**HATTERS,**

Montgomery st., cor. of Commercial.

SAN FRANCISCO.

TO OUR FRIENDS AND THE PUBLIC GENERALLY.

Having Purchased the entire interest of Messrs FISHER & Co., in this city, we shall, on the 1st day of May assume the management of the

HAT EMPORIUM,

so long conducted by that firm.

Mr. WILLIAM H. MEAD, for the last seven years Salesman with Messrs Fisher & Co., respectfully solicits a continuance of the patronage so long and liberally bestowed upon the old House, feeling entire confidence in our ability to suit in every particular.

Mr. THEODORE VAN TASSEL, for eight years with Messrs Le Gay & Co., would be pleased to see his friends at his new place of business.  
The long practical experience of Messrs Mead & Van Tassel in the Trade justifies them in saying that their work cannot be excelled either in finish or durability. Having perfected arrangements, we shall be in constant receipt, by every steamer of soft goods of the very finest

French and American Manufacture.

Our Stock now on hand is superb.  
Call and examine, and judge of the merits of our claim to the title of "LEADERS OF FASHION."  
Respectfully,

MEAD & VAN TASSEL.

nov2 Montgomery street, cor. Commercial.

### D. NORCROSS,

Masonic Temple, No. 6, Post Street.

**Military Goods of all Descriptions.**

Navy Trimmings and Embroideries.

REGALIA FOR ALL ORDERS.

aug 17

### HOTELS.

### International Hotel,

JACKSON STREET, ----- SAN FRANCISCO

[A few doors above Montgomery.]

**FIRE-PROOF BRICK BUILDING.**

Most convenient to the Steamer's Landing, Business etc. & Places of Amusement

OPEN ALL NIGHT.

City Railroad Cars Pass the Door.

REDUCTION IN PRICES.

Fine Bathing Rooms attached to the Barber Shop Warm and Cold shower Baths Free to Guests.

THOROUGHLY RENOVATED AND NEWLY FURNISHED this spring. Every Room opens to the Light and Air. Each room is furnished with a first quality Patent spring bed and Hair mattresses. The International offers to guests the greatest number and

BEST FURNISHED FAMILY ROOMS;

and BETTER AS GOOD A TABLE as any House in the City. I am determined that the INTERNATIONAL shall be the most comfortable, best regulated, and in all respects superior to any like establishment in the state, and shall aim to merit a continuance of the popular favor it has enjoyed heretofore. It will be conducted on Temperance Principles.

F. E. WEYGANT, PROPRIETOR.

### Tremont House,

418 and 420 ----- Jackson Street,

[A few doors from Montgomery.] SAN FRANCISCO, CAL.

THIS FINE FIRE-PROOF BUILDING OFFERS MANY advantages to the traveler for convenience. It is only half a block from the Post Office and Custom House, and about the same distance from the principal places of Amusement.

The City Railroad Cars pass the Door.

The House is conducted on Temperance Principles,

WHICH SECURES TO OUR GUESTS QUIET.

The prices for board and Rooms are very moderate—by the day, meal or week. WE SOLICIT A CALL FROM ALL.

F. E. WEYGANT, Proprietor.

For the accommodation of my many guests I have taken and refurbished the INTERNATIONAL HOTEL, and will carry on the two houses in connection, so that Travelers wishing to put up at either house, may take the Tremont or International Hotel Coach and be taken to either House with their baggage, FREE.

F. E. WEYGANT.

### THE RAILROAD HOUSE.

Nos. 318 and 320 Commercial & Clay Sts.,  
SAN FRANCISCO.

H. T. FELTON, PROPRIETOR.

The above House is a Fire-proof building, with Granite Front, and kept on the European Plan, with board and lodging by Day or Week to suit the convenience of our Patrons.

The Rooms are handsomely furnished, supplied with Patent Spring Beds, and Hair Mattresses, affording very superior accommodations for families or single persons.

The Table is supplied with the best the market affords at prices to suit the times.

The Rail Road House Coach is always in attendance at the Steamers to convey passengers and their baggage to the House Free of Charge.

The House is open all night.

### PATRONIZE

HOME MANUFACTURIES!!!

James Longshore,

Trunk and Valise Manufacturer,

307 Sansome Street, under Toham House. Trunks and Valises, Wholesale and Retail, Fine Sole Leather Trunks, Valises, and a fine assortment of LADIES' TRUNKS constantly on hand. Trunks covered and repaired. aug x

### APARTMENTS.

FURNISHED APARTMENTS, WITH, OR WITHOUT Board, at 1018 Powell Street, between Clay and Washington street. Persons desirous of a respectable home will do well to apply. jy8

### D. MORRIS, MACHINE SHOP,

227 Market, corner of Beale Street.

Manufacturer of

WARRANTED FIRE-PROOF SAFES

Mill Work, of all kinds made to order. All kinds of Repairing done at moderate prices. jel3



FOUNDRIES & MACHINE SHOPS.

PORTLAND BOILER WORKS.

MOYNIHAN & AITKEN,

Boiler Makers & Sheet Iron Workers,

Mission, between Beal & Fremont Sts,  
San Francisco.

N. B. All kinds of Boiler and Sheet Iron executed at the shortest notice, and on the most reasonable terms.  
Jy 29

PUMPS!

HARRISON'S

California Lift and Force Pump,

WITHOUT VALVES OR PACKING,

Suitable for Mines, Fire-Engines, Wrecking or Irrigating. These are the Cheapest, Lightest and most durable, and least liable to get out of order, of any Pump yet invented.

ALL SIZES;

Capable of throwing from ONE HUNDRED to FIVE THOUSAND gallons per Minute—For sale by

C. H. HARRISON,

PHOENIX OIL WORKS,

10-15 617 Front Street, San Francisco.

50 lbs. MARINE and

Fire-Proof Paint,

MANUFACTURED BY THE PACIFIC METALLURGICAL Works in this city, for Hulls and Decks of Vessels from ground Mineral Rock contains Arsenic, Copper, Litharge and six other Minerals. When used on the Decks or Bottoms of Ships, it is equal to a coat of Stone, and quite equal to Copper, no worms will ever effect it, and cheaper than any other paint.

DIRECTIONS:

For Decks of Ships, use two parts Mineral Paint, one part White Lead, mix with Linseed Oil.

For Bottoms of Vessels, use one part ground sulphur, three parts Mineral Paint, mix with Coal Tar and apply it hot.

For sale by all Ship Chandlers and Tradesmen, in boxes of 50 lbs. each, or by the Pacific Metallurgical Works.

25 POUNDS FIRE-PROOF PAINT.

When used on Roofs, Buildings, or Fences, it is equal to covering them with a coat of Stone, being perfectly Fire Proof, and costing less than any paint.

DIRECTIONS:

HOUSE:—Mix three parts Mineral Paint with one part white lead, thin with Linseed oil; if a lighter color is wanted, mix less paint, more lead.

ROOF:—Five parts of Mineral Paint, one part white Lead; mix with Linseed oil. Put it thick on a tin Roof as one coat when properly applied will last three years.

S. C. BRADSHAW, Agt.,  
G. T. FOURCIE, Superintendent.

WORKS, North Beach; Office, 500 Sacramento st., San Francisco.

HEPBURN & PETERSON'S  
AMALGAMATOR.

The subscribers would call the attention of the Mining Public to their Reducer and Amalgamator, and also to their Separator for reducing and separating the mineral from

GOLD AND SILVER ORES,

manufactured and exhibited at the Vulcan Iron Works, Nos 137 and 139 First street, San Francisco.

These machines secure to the miner a more expeditious and perfect Reduction and Amalgamation, a less liability to accident and delay, and a greater amount of useful effect in proportion to the power employed to keep them in operation than any other machines now in use for producing similar results. This fact is attested to by their general adoption and preference at all the principal Reduction Works in Nevada Territory; among which may be mentioned the Gould & Curry Mill, the Silver State Reduction Works, Yaphy First Mill, Pioneer Mill, Eastern Slope Mill, Phoenix Mill, etc.

nov8 3m\* HEPBURN & PETERSON.

SOUTH PARK

Quartz Mill and Reduction Works,

GOLD AND SILVER ORES WORKED AT REASONABLE rates, and Working Assays made of small lots. All kinds of ores crushed at short notice.

J. H. SMITH & CO.,

Office at the Mill, South Beach and Third St.  
Jy 13 W. R. WATERS Secretary.

W. W. HANSCOM,

Steam and Mechanical Engineer,

Designs furnished, and Drawings made for Engines, Mills, Water Wheels, Mining Machinery, etc., etc. Agent for MacKenzie's Patent Cupolo and Blower.

At Golden State Iron Works,

First Street, San Francisco.  
aug x

PATENT CLAIMS.—We will furnish, on application, the claim of any invention that has been patented within the last fourteen years. The name of the patentee—date of patent, when known, and two dollars for copying should be sent.

MODELS.—Inventors will please attach to all models sent to us, their names and addresses, in a legible, permanent form, this will avoid confusion and prevent errors.

PALMER, HANSCOM & CO.,

GOLDEN STATE IRON WORKS,

No. 10, First Street, San Francisco,

Furnish Castings and Machinery of all kinds

ALSO:

GENUINE WHITE IRON SHOES AND DIERS.

PALMER, HANSCOMB & CO.

To Quartz Miners.

Knox's Improved

AMALGAMATING PAN,

WITH

PALMER'S PATENT STEAM CHEST.

THE ABOVE COMBINATION SECURES THE MOST complete amalgamation of the precious metals of any process now known.

By its steam is introduced in the most effective and economical manner, while it is peculiarly adapted to the catching of floating gold and silver, known to be other wise lost. Made exclusively by

PALMER, HANSCOMB & CO.,

GOLDEN STATE IRON WORKS,

Nos. 19 & 21 First Street, San Francisco

The public are informed that Letters Patent have been granted the undersigned upon Steam Chest False Bottoms for the inside of Amalgamating Pans or Tubs, and are cautioned against making, buying, using or selling the same without his consent. W. A. PALMER.

Miners' Foundry

—AND—

MACHINE WORKS,

First St., between Howard & Folsom,

SAN FRANCISCO.

EVERY DESCRIPTION OF IRON AND BRASS MACHINERY, the Best and Most Economical, manufactured in the state of California, will be furnished with dispatch at the Miners' Foundry and Machine Works, as:

Steam Engines and Boilers, Flour, Saw and Quartz mill machinery, Mining Pumps, Amalgamators, Retorts, Etc., Etc.

Particular attention will be given to the manufacture of Machinery in sections, designed for places of difficult access. Various models of Quartz Crushers, Amalgamators and Water Wheels—some in operation and on exhibition.

\* Parties desiring to test their ores practically, in small quantities will be afforded ample facilities, free of cost.

All parties desiring accurate and highly finished drawings and Superior Machinery, at most reasonable rates are cordially invited to call before contracting elsewhere

HOWLAND, ANGEL & KING

San Francisco, February 23, 1863.

REYNOLDS'

Patent Cut-Off and Governor,  
FOR STEAM ENGINES.

127 of these Invaluable Machines,  
ARE NOW IN USE

in California and Nevada Territory, giving a perfectly regular motion and

Saving 20 to 65 per cent of the Fuel.

Steen's Improved Governor

is the CHEAPEST, SIMPLEST and QUICKEST to act and least liable to get out of order of any Governor in use. It can be seen in operation at the Golden State Iron Works, and at the Stone Breaker, foot of Market Street, San Francisco.

Clark's Steam and Fire Regulator,

For controlling the Draft or Blast by opening the Chimney or Valve in the Blast Pipe by the pressure of the steam in the boiler. It will regulate the pressure to a pound, on the square inch. It cannot get out of order and any person can put one up in an hour after the damper is put in.

Ingersoll's Patent Drill Press,

With which drilling can be done the same as with the common rechet, and when small holes are wanted, it can be done four times as fast. The handle can be worked in any direction.

Felt for Steam Boilers, Pipes, Etc.,

At the lowest market rates.

E. T. STEEN AGENT.

No. 33 Fremont Street, San Francisco.

THE  
BRYAN BATTERY.

The vast interest involved in the reduction of ores on this coast, renders it of the highest importance that the Machinery employed for this purpose should be of the most effective, Economical and Durable character. It may be safely said that Millions of Dollars have already been expended upon the various experiments in this class of Machinery, and it is a fact well known to all who have had any practical experience in the matter, that every new process developed during the past twelve years, has been set down as a failure. The Ordinary Stamp Battery

ALONE STANDING THE TEST.

This, with the Improvements which Experience has suggested, is now regarded, by common consent, as the only reliable

METHOD OF CRUSHING ORE.

THE BRYAN BATTERY, as now constructed, is believed to combine all the improvements which the experience of the past has afforded. They have been

EXCLUSIVELY ADOPTED

by many of the most prominent Mining Companies in the country, and have been, for the three past years, subjected to the most severe of all tests—that of constant use—and in every case have been pronounced

EFFECTIVE, SUBSTANTIAL AND RELIABLE.

They are now extensively used throughout the mineral regions of California, Nevada and Mexico, and have established a claim to public confidence, never yet equalled in any piece of mining machinery.

These Mills are constructed almost entirely of Iron, and, consequently, are not affected by the intense heat and dryness of atmosphere, common to all mining localities. They are adapted to

BOTH WET AND DRY CRUSHING,

and are warranted to reduce, with the same weight of Stamps, 25 per cent, more rock than any other mill in use. Each Battery is complete in itself, and forms a perfect mill—while any number of them can be added at a subsequent time—thus preserving the symmetry and uniformity of the Mill

As an evidence of the increasing favor with which these mills are regarded, we would mention that the Celebrated Ophir Company first introduced them into their works in 1860, and have been adding a number of Batteries, each subsequent year, until they now have Nineteen, running Seventy-six Stamps.

They are perfectly fitted and set up at our Works, before shipping, each piece being marked and numbered, so that they can be put up and set at work in ten hours after arriving on the ground. They are made of two sizes, four and five Stamps each. The Four Stamp Battery weighing complete about 6,000 pounds, and the Five Stamp about 7,000. The Mortar Bed being cast in sections, when desired, so that the mills can be packed over any mountain road.

We annex the names of a few well known Companies who have adopted them—running from four to seventy-five stamps each—to whom reference is made:

Ophir Mining Co., Washoe Valley,  
San Marcial Co., Mexico,  
John D. Winters & Co., Esmeralda,  
Crown Point Co., Gold Hill,  
Potosi Mining Co., Virginia City,  
Tajo Mining Co., Mexico,  
Sheba Mining Co., Humboldt.  
Lotta Mills Co., Coso.  
American & Mexican Co., Mexico,  
San Carlos Mining Co., Owen's River,  
Union Quartz Co., Aurora,  
Triunfo Mining Co., Mexico,  
Napa Quartz Co., Aurora,  
Petaluma Quartz Co., Gold Hill,  
Francis Mellus & Co., Slate Range,  
W. R. Churchill & Co., Mexico,  
Willow Springs Co., Coso,  
Hews, Howe & Co., Rich Gulch Flat,  
F. A. Benjamin & Co., Mexico,  
O. J. Parker & Co., Nicaragua,  
Gibbons & Clayton, Esmeralda,  
Smith & Clouser, S. F. Reduction Works.  
Amagoza Mining Co., San Bernardino,

MANUFACTURED ONLY BY

GODDARD & CO.,

At the Pacific Iron Works.

SAN FRANCISCO.

on 125 to 136 First street, and 126 to 144

Fremont street.

BOOK KEEPING,  
Penmanship

AND  
COMMERCIAL CALCULATIONS,

Taught by J. S. LUTY

PRACTICAL ACCOUNTANT.

305 Montgomery Street, Corner of Pine.

TO QUARTZ MINERS.

All persons interested in Mining Machinery are invited to call at Donahue's Foundry and examine my improved Amalgamator. It is unquestionably superior to anything now known for amalgamating Silver and Gold. It works 1000 pounds at a time, and will amalgamate over three tons a day. By the motion of the revolving miller, the pulp is drawn through its centre and passes under it, between the grinding surfaces, to the circumference: from whence it passes again over the miller to the centre, through the holes and between the grinding surface to the circumference as before. Thus a constant circulation of the pulp is kept up, bringing the particles of ore again and again under the miller, and reducing the whole mass to an insubstantial powder.

No quicksilver lies between the surfaces to be ground, but at the circumference and centre of the pan where the metal must pass through it as the pulp circulates.

A patent was granted for this Amalgamator in December last, and all persons are again warned against purchasing machines made at the Miners' Foundry called "Wheeler's Amalgamator," as they are an infringement on my patent, and a suit is now pending in the U. S. Circuit Court against the parties infringing. My Amalgamators can be seen running at Donahue's Foundry, where all can judge of their operation and the very superior style in which they are being manufactured.  
sep21 THOMAS VARNEY.

RIEHN, HEMME & CO.,

ASSAYERS.

Office, Montgomery street, cor. of California  
OPPOSITE WELLS, FARGO & CO.

Assays Made of ores, Minerals  
and Metals.

REFERRED WITH PERMISSION TO

Messrs. F. PARROT & CO., Messrs. ALSOP & CO.,  
R. B. WAIN, Esq., DONOHUE, RALSTON & CO.

CHAS. F. RIEHN, late U. S. Branch Mint, given Lessons in Assaying, also in Mineralogy and Chemistry as far as required to become a practical Assayer.

G. E. MOORE,

Assayer and Analytical Chemist,

No. 612 Sacramento Street,

HAVING ESTABLISHED A CHEMICAL LABORATORY, furnished with every requisite for delicate Analytical work, is prepared to execute the Assay and Analysis of Ores, Mineral Waters, Guanos, etc., with accuracy and dispatch.

REFERENCES:

Prof. J. D. Whitney, State Geologist, San Francisco  
Alsop & Co., San Francisco.  
Sather & Church, San Francisco.  
John Parrott, San Francisco.  
D. O. Mills, Sacramento.

sep14

I. C. E. KLEPZIG & CO.,

GUN MAKERS,

...AND...

DEALERS IN GUN MATERIALS,

733 Washington street, San Francisco,

[One door above Kearney street.]

Repairing done in a workmanlike manner at the shortest notice.  
Gilding, and also Silver Plating, by E. Eklund. j621

LEANDER RANSOM,

Civil Engineer

AND

SURVEYOR,

Having been connected with the public works of the State of Ohio for 20 years, and the public surveys of the State of California for 7 years.

ALSO

STATE LOCATING AGENT.

And as such having the sale of

600,000 ACRES OF STATE SCHOOL LANDS,

At the low price of \$1.25 per Acre.

Terms—Twenty per cent in cash and the balance on a credit of several years.  
OFFICE, 328 Montgomery streets. oct-8

WANTED

By a competent person, the Secretaryship of four Mining Companies. Books to be kept at the Office of the Mining and Scientific Press, No 67 Government House Inquire as above. oct6



**Great Central Mining Company, Arizona.—San Francisco,** December 24th, 1863.—The first annual meeting of Stockholders in the Great Central Mining Company, will be held on THURSDAY, January 7th, 1864, at the Office of the Company, 642 Sacramento street, at 7 o'clock, P. M. By order of the President.

J. H. KIBBE, Secretary.

**Enterprise Copper Mining Co.—Office, 628 Montgomery St., San Francisco.** Notice is hereby given that there will be sold at the office of the Enterprise Copper Mining Company, on SATURDAY, January 30th, 1864, at 10 o'clock, A. M., so many shares of the Capital Stock of said Company as will be necessary to pay all assessments due and delinquent, December 10th, 1863, standing in the names of the following parties:

Share.	Am't due.
William Harris.....400	\$100.00
J. P. Dameron.....100	20.00
John M. Cannon.....25	7.50
Thomas Donahoe.....15	4.50
John Cochran.....25	7.50
S. W. Melrose.....20	5.00

By order of the Board of Trustees. M. J. ELMORE, Sec.

**El Tesoro Silver Mining Company, December 17th, 1863.**—Notice is hereby given, that in accordance with the laws of the State of California, and an order duly made by the Board of Trustees of the El Tesoro Silver Mining Company, December 14th, 1863, there will be sold at public Auction, by Jerome Rice & Co., 327 Montgomery St., San Francisco, on MONDAY, January 18th, 1864, at Eleven o'clock, A. M., so many of the Shares of the Capital Stock of the Company, standing in the names of the following persons or shareholders, as will be necessary for the payment of assessments duly levied thereon, together with the expenses of advertisement, and all other expenses of sale, to wit:

Shareholders.	No. Ass't.	No. Shares.	Amount.
Samuel B. Dean.....1	2	4	112 1/2
G. W. Johnson.....1	2	4	150
Geo. B. Hayes.....1	2	4	337 1/2
T. T. Bradshaw.....1	2	4	512
S. C. Bradshaw.....1	2	4	124 1/2
S. C. Bradshaw, Jr.....1	2	4	15
Geo. H. Bradshaw.....1	2	4	15
P. Kalkman.....1	2	4	15

By order of the Board of Trustees. H. C. KIBBE, Sec'y.

**San Francisco Silver Mining Company, Lower California.** Office 542 Sacramento street, San Francisco, December 24th, 1863.—Notice is hereby given, that in accordance with the laws of the State of California, and the By-laws of the Company, and an order duly made by the Board of Trustees of the San Francisco Silver Mining Company, there will be sold at public auction, at the sales-room of Jerome Rice & Co., No. 327 Montgomery street, San Francisco, on MONDAY, January 25th, 1864, to the highest bidder for cash, in U. S. gold coin, so many shares of the capital stock of said Company, standing in the names of the following persons, as will be sufficient to pay the assessments heretofore levied and past due, together with the cost of advertisements and expenses of sale, unless said assessments and charges are sooner paid.

Names.	Shares.	Amount.
S. C. Bradshaw.....439		\$304.05
S. C. Bradshaw, Jr.....20		7.12
Geo. B. Hayes.....8		2.50
E. T. Peck.....60		17.50
J. R. Stewart.....25		17.50
C. H. Parker.....75		15.00
Geo. Ames.....1		2.50
Wm. H. Huntington.....6		1.20
C. Boardman.....25		8.12
J. M. Cunningham.....10		2.50
H. W. Chesney.....10		2.50
Francis Cutting.....5		1.25
H. Kimball.....10		2.50
Mrs. C. Smith.....8		2.00
E. Sammis.....10		2.50
C. Lasselle Taylor.....125		12.50
J. K. Warren.....10		2.50
J. M. Volney.....10		2.50
J. B. Ryder.....25		15.00
Robert C. Bartlett.....20		2.00
Martin P. Townsend.....10		2.50
John Pinkhaber.....5		1.00
Mrs. C. S. Brownell.....7		7.00
John Perry.....5		5.00
Simon Strahan.....5		5.00
W. T. James.....5		1.62
Henry S. Smith.....20		2.50
W. L. Anderson.....10		2.50
Chas. M. Cornell.....10		1.00
P. J. Wood.....25		6.00
John A. Lundquist.....5		5.00
Thos. Pike.....2		2.00
G. W. Smith.....10		2.50

By order of the Board of Trustees. H. C. KIBBE, Secretary.

## MINING AND SCIENTIFIC PRESS Pocket Calendar for 1864.

1864.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	1864.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
JAN...	3	4	5	6	7	8	9	JULY...	3	4	5	6	7	8	9
FEB...	1	2	3	4	5	6	7	AUG...	31	1	2	3	4	5	6
MAR...	6	7	8	9	10	11	12	SEP...	1	2	3	4	5	6	7
APR...	10	11	12	13	14	15	16	OCT...	3	4	5	6	7	8	9
MAY...	13	14	15	16	17	18	19	NOV...	10	11	12	13	14	15	16
JUNE...	17	18	19	20	21	22	23	DEC...	17	18	19	20	21	22	23
	20	21	22	23	24	25	26		24	25	26	27	28	29	30
	27	28	29	30	31				31						

## CROCKER'S STOCK AND ASSESSMENT LEDGER.

Copyright Secured—Price \$10.

The necessity of a proper book for keeping the Stock and Assessment accounts of Corporations has long been very much needed. One that would combine economy and simplicity, and would not require the services of an experienced book-keeper to keep the accounts correctly. CROCKER'S STOCK AND ASSESSMENT LEDGER, but met this requirement; we have submitted it to several Secretaries of corporations, and they acknowledge that the plan is admirable, and just what has long been wanted. The printed headings are a perfect explanation of the manner of keeping it; and any person, whether they understand book-keeping or not, cannot make an error in the accounts. The Stock and Assessment accounts are so arranged that the Secretary can at a moment tell how any stockholder's account stands, both in regard to Stock and Assessments. He can also, with the greatest ease, trace any certificate, through any number of transfers, to the original one issued. It saves a great amount of labor, as it does not require one-fourth the writing of the ordinary method. It dispenses entirely with the old style of Stock Ledger, Stock Journal and Assessment Book, all three of which Secretaries have heretofore been obliged to keep, condensing the whole in one book. To a person who is Secretary of several companies, this book will prove invaluable, and we feel no hesitation in guaranteeing satisfaction to those who may order them. Specimens of the book sent to those who desire to examine it. The books are ruled with one or two accounts to the page. State which is preferred.

Published and for sale, wholesale and retail, by  
**H. S. CROCKER & CO.,**  
Book and Job Printers, Sacramento.

**Certificates!**  
And complete sets of books for Corporations, in the finest style, at short notice, and low rates. 7-1m

## MINING NOTICES.

**Enterprise Copper Mining Company.**—Office 528 Montgomery street, San Francisco. At a meeting of the Board of Trustees of this company, held December 12th, an assessment of ten cents per share was levied, payable immediately, and another assessment of eight cents per share, payable January 1st, 1864, and another assessment of eight cents per share payable February 1st, 1864, all payable in U. S. gold coin, to Thomas S. Levy, the Treasurer, at Lincoln, Placer county, or to the Secretary, at the office of the Company.

By order of the Board of Trustees. M. G. ELMORE, Secretary.

**Wide West Copper Mining Company.** Office 528 Montgomery street, San Francisco, December 12, 1863. Notice is hereby given that assessment No. 2 of twenty-five cents was this day levied on each and every share of the capital stock of the Wide West Copper Mining Company, payable in U. S. gold coin, to the Secretary at the office of the Company, or to J. M. PIKE, Superintendent, Copopolis.

By order of the Board of Trustees. M. G. ELMORE, Sec.

**Emmett Copper Mining Company.**—Notice is hereby given that at a meeting of the Board of Trustees of the Emmet Copper Mining Company, held at their office, No. 528 Montgomery street, San Francisco, December 3, 1863, an assessment of twenty-five cents per share was levied upon each and every share of the capital stock of said Company, payable immediately in U. S. gold coin to the Secretary at the office of the Company, or to L. HONIGSBERGER, Copopolis.

By order of the Board of Trustees. M. G. ELMORE, Secretary.

**Mammoth Consolidated Gold & Silver Mining Co.,** Excelsior District, S. T.—Office 528 Montgomery St., San Francisco, Nov. 28, 1863. Notice is hereby given: there will be sold at Public Auction, at the office of the Company, in San Francisco, on Saturday January 9th, 1864 at 12 o'clock, M. of that day, to the highest bidder, for cash in U. S. gold coin, so many Shares of the Capital Stock of said Company standing in the names of the following shareholders as will be necessary to pay assessment No. 1, of ten (10) cents per share, duly levied thereon by the Board of Trustees on the 9th of May, 1863; also assessment No. 2, of thirty (30) cents per share, duly levied thereon by the Board of Trustees on the 27th of June, 1863, together with all the expenses of advertising and sale, unless said assessments are previously paid to M. G. Elmore, Sec. San Francisco, or to W. H. Dalrymple, Financial Sec., Aurora.

Names.	No. Cert.	No. Ass't.	Shares.	Am't.
M. J. Brown.....6	7	2	25	\$7.50
J. B. Best.....74	343	12	200	115.00
G. W. Bailey.....344		12	200	80.00
G. C. Chalm.....33 to 37 incl		2	100	30.00
J. J. O'Donoghue.....358		12	250	22.50
J. C. O'Connell.....334		12	250	12.50
T. A. Cutter.....25 393 to 403 incl		2	125	37.50
J. R. Dudley.....27 28		12	50	29.00
U. B. Freeman.....50 to 57 incl		12	200	80.00
WD Garland.....437 441		2	275	82.50
	450 451			
D. H. Haskell.....65 to 69 incl		12	50	20.00
W. A. Holt.....70 71 72		2	25	7.50
James Jaques.....333		12	250	100.00
R. P. Johnson.....443		2	100	30.00
A. B. Kelly.....275 to 281 incl		2	100	30.00
J. H. Latcham.....283 284 285		2	60	16.93
	291 incl			
F. J. Mathews.....342		2	200	60.00
W. S. Mason.....452		2	13	8.90
John Patten.....416 417		2	15	4.50
Geo. Raymond.....128 to 131 incl		2	125	37.50
	136 to 142 incl			
G. H. Rogers.....143 to 151 incl		2	200	60.00
J. S. Shultz.....361 487		12	95	38.00
G. D. Myers.....360		12	95	2.00
J. J. Sever.....170 to 189 incl		12	200	60.00
N. Steiner.....118 to 124 incl		12	100	40.00
W. J. Smith.....191 191 192		2	75	20.00
H. S. Van Dine.....218 338		12	175	68.75
H. Watson.....263 to 267 incl		2	25	7.50
W. J. Veruon.....229 230 231		2	40	10.80
	241 242			

By order of Board of Trustees. M. G. ELMORE, Secretary.

## ASSAYS!

**Promptness and Accuracy Secured**  
By the Use of the Most Improved  
METHODS OF  
ANALYSIS!

Advantageous Terms for Prospector's Clubs  
and Mining Companies.

**J. H. CHURCHILL, M. A.,** (FROM EUROPE.)  
24 Government Block, corner of Sansome and  
Washington Streets, San Francisco. jly6  
"HINTS FOR PROSPECTORS" Free by Post.

## Mining Shares For Sale

BY  
**O. A. CRANE,**

Office 28 Government Block.

475 Shares U. S. Mining Company, Virginia City.  
910 Shares Granada Gold and Silver Mining Company  
Virginia Hill, Virginia City.  
168 Shares Evoca Consolidated Copper Mining Company,  
Crescent City, Cal.  
80 Shares Mohave Mining Company, La Paz District,  
Colorado, N. M.  
30 Shares Aspinwall Gold and Silver Mining Company,  
Devil's Gap District, N. T.  
75 Shares Washington Copper Mining Company, Indian  
Bar, Tuolumne Co.  
228 Shares Montezuma Gold and Silver Mining Company,  
Inyo District, Tulare Co.  
90 Shares Owen's County Consolidated Gold and Silver  
Mining Company, Inyo District, Tulare Co.  
50 Shares Crown Point Raynolds Gold and Silver Mining  
Company, Virginia District, N. T.  
10 Shares Triunfo Gold and Silver Mining Company,  
San Antonio District, Lower California. sep28

**N. LOMBARD INGOLS.**

**Accountant and Mining Secretary,**

No. 10 GOVERNMENT HOUSE, Cor. Washington & Sansome Sts.

OFFICE OF THE  
**Santa Cruz Petroleum Oil Works Co.,**  
**Gem Silver Mining Co.,** (Reese River, N. T.)  
**Laurel & S Mining Co.,** Copala, Sinaloa, Mex.

N. B. Mr. Ingols will pay particular attention to the adjustment of complicated accounts, Commercial and Incorporated Companies' Books, to drawing up Commercial writings and to Engrossing legal or other documents with neatness and dispatch. An experience of more than twenty-five years in every branch of his profession is a guarantee of his practical and thorough acquaintance with its duties. He has the privilege of referring to some of the leading mercantile houses and legal practitioners on the Atlantic and Pacific sides, for testimony of his business and clerical abilities.

**Heyer Bros.,**  
76 and 78 Central Street,  
BOSTON.

**HEYER & CO.,**  
IMPORTERS OF  
AMERICAN AND EUROPEAN

**Fancy Goods, Toys & Musical Instruments; also,**

SOAPS, PERFUMERY, HAIR AND TOOTH BRUSHES,  
Port Folios, Portmanteaus, Ladies' Bags, Photograph Albums, Cutlery, Willow and Parian Ware, Children's Carriages, etc. Our Stock of Violin, Guitar and other Stringed instruments, our Foreign Goods are selected by one of the firm, and the American by the Boston House (established 1824.) We have the Sole Agency for

**Hallet & Davis' Boston Pianos,**  
**Smith & Bros' Harmoniums, and**  
**Treat & Linsley's Melodeons.**

The Hallet & Davis Pianos are each supplied with their Patent Suspension Bridge, which is a decided improvement. It gives a full and clear vibration in the upper octaves, producing a quality of tone unequalled in firmness and purity. Our Melodeons and Harmoniums are of the best quality, and warranted to give satisfaction. 3m

**AGENTS WANTED.**  
We want a good Agent in every city, town and settlement, on this Coast. Applicants will send their names with reference, when specimen numbers of the **Mining & Scientific Press** will be forwarded to them, and their names added to our published "List of Agents." EWER & SMITH.

**Owens River Canal Company.**

**FOR SALE,**  
FOR ACCOUNT OF THE COMPANY, 7,000 SHARES OF the above stock, at \$1 per share. It is confidently presented to the public as the best investment, for the price, now offered in this market.  
Office of the Company No. 328 Montgomery street.

**REMOVAL.**  
**OFFICE OF THE PACIFIC METAL.**  
Surgical Office is removed to 509 Sacramento street. Having enlarged our Works at North Beach, we are now enabled to reduce from 10 to 15 tons of Silver or Gold rock per day.  
Gold and Silver ore, and Sulphuret Assays, or Sil verniths' sweepings reduced or purchased.  
COPPER ORES—Highest market rates advanced in cash, for shipment. S. C. BRADSHAW, Agent,  
509 Sacramento street, near Sansome.

## Fire Hose! Fire Hose!! Fire Hose!!!

**J. P. D. WILKINS,**  
The celebrated HARNESSE MAKER of Stockton, makes Fire Hose, from the best material, and WARRANTS a trial of the Weber Steam Engine Co., No. 3, of the city of Stockton. This Hose is manufactured at his established mill, and known to stand in pressure of 125 pounds to the square inch; as certified by the Chief Engineer.

**ALSO FOR SALE,**  
All kinds of HARNESSES and SADDLERY, at the lowest prices. REPAIRING done promptly, one door west of the Main Street Stable. oct19

**WANTED,**  
**GOLD QUARTZ SUITABLE FOR**  
**CUTTING JEWELRY,**

BY **FRONTIER A. DEVERCY,**  
aust 437 Pine street, San Francisco.

**MARTIN & Co.,**

OFFICE—224 Montgomery Street, Up Stairs,  
WILL CONTRACT FOR THE

**Purchase of Copper Ore,**

Assaying 8 per cent and upwards of Copper to the Ton. We will make ADVANCES upon Ores of COPPER, TIN and NICKEL.  
Sacks will be furnished and Freight Paid on all consignments if desired by the consignors.

**HENRY MARTIN,** **J. F. GREENMAN,**  
New York. San Francisco,  
San Francisco Post Office, Box 1259.  
je 1.

**NORTH BEACH QUARTZ MILL**  
and  
**REDUCTION WORKS**

Are prepared to work Gold and Silver ores, in large or small quantities.

Working assays made of small lots, and all kinds of ores crushed at short notice.

Our new and complete Machinery, will enable us to give results fully up to the merits of rock.

**WHEELER & THAYER, Proprietors,**  
**C. C. JONES, Amalgamator**  
San Francisco, Oct. 18, 1863.

**JOHN P. GALLAGHER.....JOSEPH H. WEED.**

**GALLAGHER & WEED,**

**BRASS & BELL FOUNDRY**

AND

**LOCK FACTORY.**

No. 125 First Street, opposite Minna, next door to Pacific Foundry, all kinds of

**Brass and Composition Castings and**  
**Finishing, done with neatness and**  
**dispatch.**

**CHURCH and STEAMBOAT BELLS, OF ALL SIZES**  
Made to order. Engine's Gongs made and hung in the best manner. Bank, Vault, Store and Prison Locks, also brass Padlocks and Shop Locks of various patterns, on hand and made to order.

Particular attention given to casting Radder Braces and Ship Work in general.

All Jobs promptly attended to.—Prices moderate.

Removed from Oregon street, between Front and Davis.

**L. F. LELAND,**

**STOCK BROKER,**

No. 621 Clay street,

Office Hours, 10 to 11, A. M.; 2 1/2 to 3 1/2, P. M.

Member of the San Francisco Stock and Exchange Board

je-29

**AGENCY**

For the Purchase and Sale of

**MEXICAN MINING STOCKS**

At No. 411 Clay Street, San Francisco.

OFFICE OF THE PENA and LA MARROÑENA Silver Mining Companies, San Antonio District, Lower California.

All persons are invited to call and examine Ores from the above mines.

je13 Wm. FAULKNER.

**New Bedford Copper Company.**

THE UNDERSIGNED HAVING BEEN APPOINTED Agents for the above Company, are receiving regular supplies of their superior manufactures of

**SHEATHING COPPER;**

**BRAZIER'S COPPER;**

**COPPER BOLTS;**

**YELLOW SHEATHING METAL;**

**COPPER AND COMPOSITION NAILS;**

Which they offer to the Trade at the lowest market rate, and on the most favorable terms.

je-29 108 Front Street, San Francisco.















